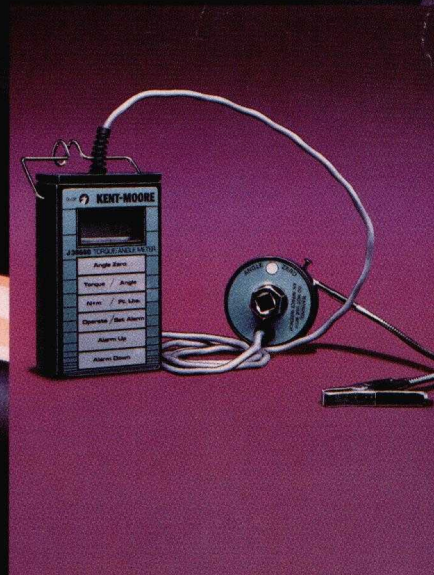


**GENERAL
MOTORS
SPECIAL
SERVICE
TOOLS
1990-91
EDITION**



KENT-MOORE

LIFETIME WARRANTY

All Kent-Moore manufactured products and parts, with the exceptions noted below, are warranted against defects in materials and workmanship for the life of the product or part.

Kent-Moore's warranty is expressly limited to persons who purchase Kent-Moore's products or parts for the purpose of resale or use in the ordinary course of the buyer's business. This warranty does not cover any product or part that has been abused, worn out, heated, ground or otherwise altered, used for a purpose other than that which it was intended, or used in a manner inconsistent with any instructions regarding its use.

Kent-Moore electronic products are warranted against defect in material and workmanship for one year.

This warranty does not cover any chains, batteries or electric motors which are sold with the Kent-Moore products. All electric motors are separately warranted by their manufacturer under the conditions stated in the separate warranty.

THIS WARRANTY IS EXCLUSIVE, AND KENT-MOORE MAKES NO OTHER WARRANTY OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, WITH RESPECT TO THE PRODUCTS MANUFACTURED AND SOLD BY IT, WHETHER AS TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER MATTER. No agent, employee or representative of Kent-Moore has any authority to bind Kent-Moore to any affirmation, representation or warranty concerning Kent-Moore products or parts, except as stated here.

If any product or part manufactured by Kent-Moore is found to be defective by Kent-Moore, in its sole judgement, Kent-Moore will, at its option, either repair or replace such defective product or part. **THIS REMEDY SHALL BE THE EXCLUSIVE REMEDY AVAILABLE FOR ANY DEFECTS IN THE PRODUCTS OR PARTS MANUFACTURED AND SOLD BY KENT-MOORE OR FOR DAMAGES RESULTING FROM ANY OTHER CAUSE WHATSOEVER, INCLUDING WITHOUT LIMITATION, KENT-MOORE'S NEGLIGENCE. KENT-MOORE SHALL NOT IN ANY EVENT BE LIABLE TO ANY BUYER FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES OF ANY KIND WHETHER FOR DEFECTIVE OR NON-CONFORMING GOODS, NEGLIGENCE, ON THE BASIS OF STRICT LIABILITY OR FOR ANY OTHER REASON.**

The purpose of this exclusive remedy shall be to provide the buyer with repair or replacement of products or parts manufactured by Kent-Moore found to be defective in materials or workmanship or negligently manufactured. This exclusive remedy shall not be deemed to have failed of its essential purpose so long as Kent-Moore is willing and able to repair or replace said defective products or parts in the prescribed manner.

Some Kent-Moore tool applications listed in this catalog designate General Motors body types using their letter code system. This convenient chart converts these letter codes into the vehicle names of each GM division.

BODY DESIGNATION	A	B	C	C & K TRUCKS	D	E	F	G VAN	H	J	K
CHEVROLET	Celebrity Wagon	Caprice Classic Caprice Classic Wagon		Silverado			Camaro*RS IROC-Z	Full Size Van		Cavalier Cavalier Z24	
PONTIAC	6000 LE/SE/AWD 6000 LE Wgn						Firebird Formula Trans Am GTA		Bonneville LE/SE/SSE	Sunbird LE/SE/GT	
OLDSMOBILE	Cutlass Cierra Cutlass Cierra SL Cutlass Cruiser Wagon	Custom Cruiser Wagon	98 Regency 98 Regency Brougham			Toronado Trofeo			Delta 88 Royale Delta 88 Royale Brougham		
BUICK	Century Custom Century Limited Century Custom Wagon	Estate Wagon	Electra Limited/Park Ave/Park Ave Ultra/T-Type			Riviera Reatta			LeSabre Custom LeSabre Limited		
CADILLAC			DeVille Fleetwood Hearse/Limo Conversion		Brougham	Eldorado					Seville
GEO										Tracker, Tracker LSi	
GMC				Sierra				Full Size Rally Vandura			

BODY DESIGNATION	L	M	M-VAN	N	R	R & V TRUCKS	S	S & T TRUCKS	T	U	V	W	Y
CHEVROLET	Corsica Beretta		Astro			Blazer (Full Size), Suburban		Blazer		Lumina APV		Lumina Lumina SS EuroSport	Corvette/ ZR-1 Convertible
PONTIAC				Grand Am LE/SE					LeMans/ GSE	Trans Sport/ SE		Grand Prix LE/STE/SE Grand Prix Turbo	
OLDSMOBILE				Cutlass Calais S/SL				Bravada		Silhouette		Cutlass Supreme C.S. International Series	
BUICK				Skylark								Regal Custom Regal Limited	
CADILLAC											Allante		
GEO		Geo Metro Geo Metro LSi Geo Metro XFi			Geo Storm Geo Storm GSi		Geo Prizm GeoPrizm GSi Geo Prizm LSi						
GMC			Safari			Jimmy (Full Size), Suburban		S-15 Jimmy Sanoma					

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INTRODUCTION

This catalog contains the Special Service Tools and Equipment specified for maintenance, repair and overhaul of the entire passenger car line of the General Motors Corporation.

Each tool, equipment item and component has been designed, developed and tested by the Kent-Moore Engineering Department in conjunction with service standards and procedures established by the respective General Motors divisions. These Kent-Moore special service products are manufactured specifically for use under the prescribed and authorized service procedures as described in service manuals, bulletins and other publications of the General Motors Corporation.

The intent of our products is to increase service department efficiency and profitability by solving a particular service problem with a unique tool that simplifies the task while minimizing the possible damage to precision parts.

Kent-Moore . . . when ordinary tools won't do.

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Steering

Suspension

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DOING BUSINESS WITH KENT-MOORE Ordering Information

As a customer of Kent-Moore, you will receive the highest level of service possible. We are confident you will find the same efficiency when ordering our products as you do when using them.

Catalog Organization

The Kent-Moore Special Service Tools and Equipment presented in this catalog appear in individual sections corresponding to the automotive component for which they are required. Within each section are illustrations of the tools or tool sets and a brief description of their application, arranged in numerical order by the part number that identifies each product. The part number, most often consisting of a "J" prefix, is specifically referred to in General Motors Divisions' service manuals and technical publications. A complete numerical listing of all GM tools in this catalog with page reference begins on page 232.

Kent-Moore Part Numbering System

Understanding the Kent-Moore part numbering system will assure you receive exactly the item you require.

For example:

J 12345	A complete tool.
J 12345-01 (-02, -03, etc.)	A tool updated for additional application or improved function.
J 12345-A (-B, -C)	
J 12345-1 (-2, -3, etc.)	Denotes the item is a component or service part of a complete tool.

Placing Your Order

Complete pricing information is provided in a separate price list. Convenient order forms are included in the center of this catalog. Copies of either are available by contacting our Order Department. The correct part number **must** appear on all orders. Be sure to include complete "Bill To" and "Ship To" addresses. Emergency orders can generally be filled the same day by contacting the order department directly.

Kent-Moore
SPX Corporation
29784 Little Mack
Roseville, MI 48066-2298
Telephone: 1-800-345-2233
Telex: 244040 KMTR UR
FAX: 313-774-9870

The Roseville, MI address should also be used for:

1. Order follow-up
2. Unlisted tool information
3. Shipping information
4. Claims
5. Returns
6. Pricing information

TERMS

Open Account (approved credit), MasterCard, VISA, C.O.D., or cash (check attached).

TAXES

United States

State and local sales and/or use tax will be added to order if applicable.

Canada

In Canada, prices include Federal Tax. Provincial Tax will be added to order if applicable.

SHIPMENTS

United States

Shipment will be made F.O.B. Roseville or Jackson, Michigan. Shipments will be made by United Parcel Service or truck unless otherwise specified.

Canada

Shipment will be made F.O.B. Windsor, Ontario.

NOTICE:

Kent-Moore reserves the right to make changes in design or construction of tools and equipment without obligation to incorporate such changes in tools and equipment previously sold.

SERVICE PARTS

Prices and part numbers of service parts or individual tools making up a tool set are shown in this catalog and price list. All Kent-Moore products are serviced and replacement items are available from stock. To order or obtain price information on unidentified parts, please describe the required part as thoroughly as possible using whatever tool numbers are available and giving use of required item.

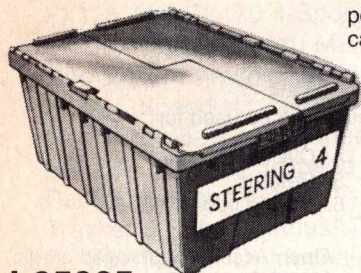
ORGANIZATIONAL SYSTEMS

ORGANIZATIONAL SYSTEMS

J 34100

GREAT CRATE™ I

Measures 21½" × 15½" × 9¾". Molded in blue polyethylene with storage capacity of 1.4 cu. ft.



J 35805

GREAT CRATE™ II

Measures 27" × 17" × 12½" 2.4 cu. ft. for those big storage jobs.



Solve space and organizational problems conveniently with the Great Crate Storage System. Use floor space efficiently, store hundreds of items including tools and vehicle components.

Great Crates are available in two versatile sizes to accommodate your storage needs. Each container includes 1" foam pad and reusable content identification plaque. Great Crates are available singularly or in multiples for stacking in Storage Racks.

Features:

- Injection molded of durable polyethylene . . . won't rust, rot or corrode; resists the damaging effects of oil, most chemicals, solvents, and temperature variance of -10° to + 150°F.
- Stacks when full with cover closed . . . nests when empty with cover open.
- Load capacity to 70 lbs. per container . . . bottom container in stack will support up to 250 lbs.
- Permanent, molded-in blue color.
- Strong, durable, easy to use, steel hinged security cover.
- Container includes molded hand grips on ends, and solid grid bottom.

STORAGE RACK & BOX COMBINATIONS

Save on these combination offers and make tool organization even more cost efficient.

J 34755

GREAT CRATE I AND RACK STORAGE SYSTEM

This combination includes 12 Great Crate I Storage boxes (J 34100) and 1 Storage Rack (J 34755). Rack measures 35½" wide, 69" high, and 21" deep.

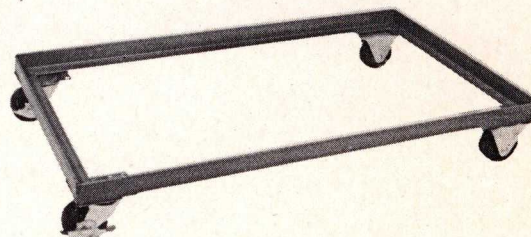


J 35810

GREAT CRATE II AND RACK STORAGE SYSTEM

This combination includes 8 Great Crate II Storage Boxes (J 35805) and 1 Storage Rack (J 35806). Rack measures 38½" wide, 54" high, and 27½" deep.

Storage Racks are 14 Gauge Steel Baked Gray Enamel.



J 34700-10

GREAT CRATE™ DOLLY

The Great Crate™ dolly will enable you to put your J 34755 Great Crate™ Storage System I on wheels. The Great Crate™ Dolly will be a great time and labor saver by allowing you the flexibility to move the complete storage system to your specific work station quickly and easily. Move your tools to where you work, or store them out of the way with J 34700-10 Great Crate™ Storage System Dolly. (Not included with J 34755 Great Crate™ Storage System I)

Features:

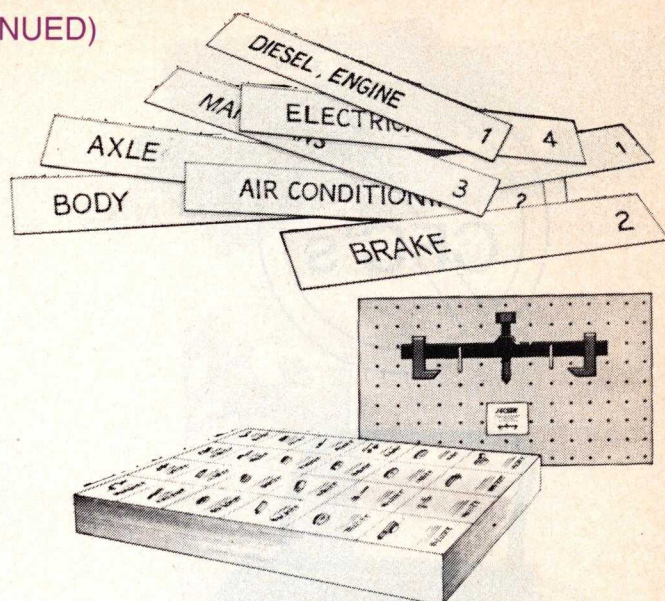
- Rugged 3" Caster Wheels
 - (2) Rigid Casters
 - (2) Swivel Casters W/ Brakes
- Heavy Duty Steel Construction

ORGANIZATIONAL SYSTEMS (CONTINUED)

J 34685

SECTION HEADER LABELS

Identify major vehicle component sections at a glance. Assortment of 48 header labels, self-adhesive vinyl, for use at the top of toolboard/wall system or on the end plate of the Great Crate. Header labels measure 11" by 2 1/8" and correspond with the section column on Tool Inventory worksheets in the Organizational Manual. White with blue printing.



J 34695-E

TOOL DECALS

Set includes decals for all special tools with application 1979 to current. Decals measure 2 1/8" by 1 7/8" and have tool numbers, descriptions and a picture of the tool. Use with toolboard or box storage system. Over 1,600 self-adhesive vinyl decals. White with blue printing. Used in the inside lid of Great Crate containers or with traditional peg board organizational systems.

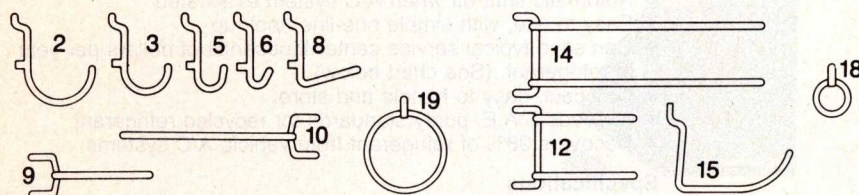
TOOL BOARD HOOK SELECTIONS

Tool board hooks are available in a full range of shapes & sizes for use with peg board systems. Hooks can be purchased in convenient assortments of the most often-used sizes and are also available in specific hook packages.

J 34720
Small Assortment
130 Hooks

J 34721
Medium Assortment
325 Hooks

J 34722
Large Assortment
485 Hooks



SPECIFIC HOOK PACKAGES

Part No.	Hook No.	Package Quantity
J 34702-25	2	25
J 34703-25	3	25
J 34705-10	5	10
J 34706-10	6	10
J 34708-10	8	10
J 34709-10	9	10
J 34710-5	10	5
J 34712-5	12	5
J 34714-5	14	5
J 34715-5	15	5
J 34718-10	18	10
J 34719-10	19	10

MISCELLANEOUS

J 24894-01

TECHNICIAN TOOL CHECKS

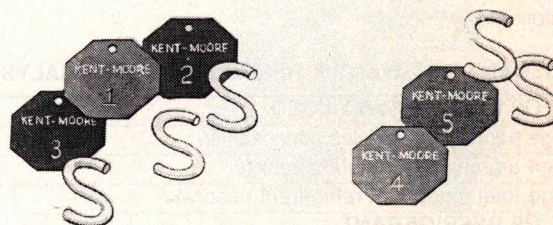
Sturdy, blue anodized aluminum. Four of each numbered 1 through 25. S-hooks for hanging included.

CUSTOM TOOL STORAGE CASES

These custom molded storage cases are a convenient way to organize a specific group of tools. The cases incorporate custom designed cavities for tool storage and include complete instructions for each tool (except J 37062):

NOTE: Tools must be purchased separately.

Part No.	Application
J 35550	Set of 3 Universal Cases 1- 17" x 13" x 4 1/2" 1- 14" x 11" x 4 1/2" 1- 12 1/2" x 9" x 3"
J 36826	HM 290 Transmission
J 36893-A	W-Car (GM 10)
J 36844	HM 282 Transaxle
J 36999	2.3L Quad 4
J 37062	T.B.I. Tools
J 37775	Geo Tracker
J 38488	Geo Storm





U.S. Patent No. 4,768,347

J 38100-B KENT-MOORE ACR³ SYSTEM

The Kent-Moore Air Conditioning Refrigerant Recovery and Recycling System (ACR³) comes in direct response to the earth's ozone depletion problem. Today, we learn more and more of how the ozone layer is gradually being destroyed by chlorofluorocarbons chiefly used as refrigerants in automotive and building A/C units, and also in cleaning solvents, sterilants, aerosol propellants, and blowing agents such as those used for cushioning, packaging, and insulation. The ACR³ is designed to recover and recycle refrigerant without additional costs for new refrigerants.

To Recover Refrigerant

Simply attach your manifold gauge set to the vehicle A/C system and to the ACR³ system. Refrigerant is drawn from the vehicle through the patented recovery system and is directed to the 30-pound storage tank. The system automatically shuts off when the A/C system is completely evacuated.

To Recycle Refrigerant

After recovering refrigerant from a number of vehicles and the 30-pound tank is full, turn on main power and recycling switch. Liquid refrigerant is continuously pumped from the storage tank through the filter/drier. A moisture indicator will change color after approximately 30 minutes to indicate that recycling is complete.

Important Features of the ACR³

- U.L. & C.S.A. approved
- Two 30-lb. Reusable Storage Tanks
- Recovers refrigerants in less time than free venting into the atmosphere
- "Continuous loop recycling" through filter/dryer
- Automatic shut-off when A/C system evacuated
- Easy to use, with simple one-line hook-up
- Can save typical service center thousands of dollars per year in refrigerant. (See chart below)
- Compact, easy to handle and store.
- Exceeds S.A.E. purity standards for recycled refrigerant
- Recovers 98% of refrigerant from vehicle A/C systems.

Specifications

Tank: Two 30-lb, reusable D.O.T.,
4BW construction
Voltage: 115V A.C
Refrigerant: R-12
Dimensions: 42" H x 21"W x 20"D
Weight: Approx. 130 lbs.

Contact Kent-Moore for service or service part information
1-800-345-2233.

REFRIGERANT RECOVERY & RECYCLING COST ANALYSIS FOR TYPICAL SERVICE CENTER

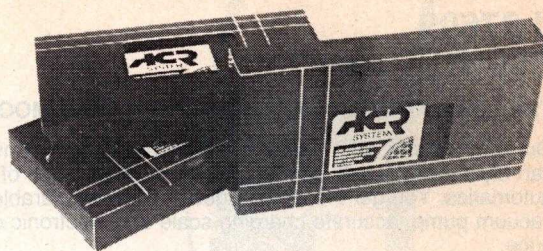
COST OF REFRIGERANT USED			
Average number of vehicles serviced/wk.	35		
Average amount of refrigerant/vehicle	3 lbs.		
Average total amount of refrigerant used/wk.	100 lbs.		
COST OF REFRIGERANT	2.00/lb.	4.00/lb.	6.00/lb.
Total cost of refrigerant/wk.	\$ 200	\$ 400	\$ 600
Total cost of refrigerant/yr.	\$10,400	\$20,800	\$31,200
COST SAVINGS OF RECOVERING REFRIGERANT			
Average amount recoverable from systems/wk.*	30 lbs.		
COST OF REFRIGERANT	2.00/lb.	4.00/lb.	6.00/lb.
Total cost savings for recovered refrigerant/wk.	\$ 60	\$ 120	\$ 180
Total cost savings for recovered refrigerant/yr.	\$ 3,120	\$ 6,240	\$ 9,360
EQUIPMENT PAYBACK PERIOD	47 wks.**	23 wks.**	16 wks.

* Many systems serviced are low on refrigerant.

** Based on list price of \$2,795.00

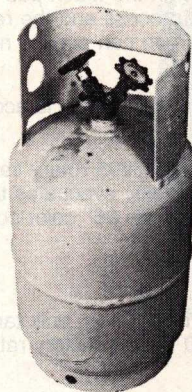
J 38100-TPE ACR³ VIDEO TAPE

Reviews environmental concerns in regard to (CFC's) chlorofluorocarbons, and includes general operating and filter changing procedures.

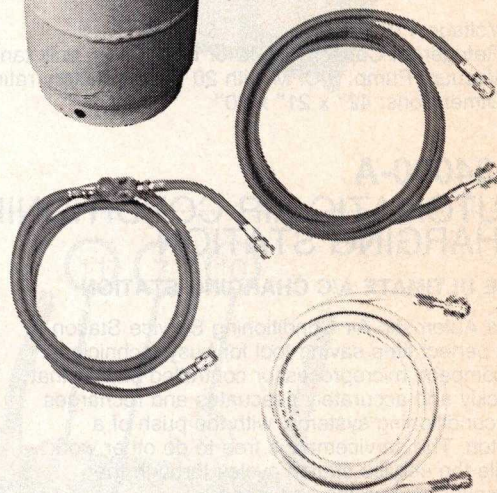


J 38100-30 30 LB. REFRIGERANT STORAGE TANK

The 30-pound refillable refrigerant tank is the only tank you should use with your recovery/recycling stations. The overfill limitation mechanism has been calibrated specifically for this tank and the valving is set up specifically for use with our recovery/recycling stations. The 30-pound tank, which meets DOT specification 4BW, will also work with charging stations you already own and with any other charging station utilizing a 30-pound tank.



- J 38100-24 Blue Quick Seal Hose
- J 38100-25 Red Manual Shut-off Hose
- J 38100-26 Yellow Quick Seal Hose
- J 38100-3 Instruction Book



J 38100-10 FILTER DRIER CORE (Case of 6 filters)

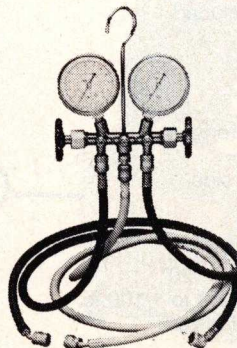
The filter drier on the station has been designed to trap moisture, acid and particulates. Naturally, this means the filter core must be changed as needed (approx. every 300 lbs. of recycled refrigerant) to assure adequate moisture and contaminant removal from used refrigerant. It is essential for proper filtration that you use only J 38100-10 filter drier cores.



COMPLEMENTARY EQUIPMENT

J 23575-B COMPLETE MANIFOLD ASSEMBLY

(Featured on page 11)



AIR CONDITIONING

J 37699 SMART CART™

THE LOGICAL COMPANION FOR YOUR KENT-MOORE ACR³

Our new Smart Cart™ combines the economy and convenient storage of the cart-style stations with the time saving sophistication of the cabinet-style automatics. You get the advantages of compact durable construction, powerful vacuum pump, accurate charging scale and electronic controls at an economical price.

Programming is fast and simple with the touch pad microprocessor controls. Solenoids control the evacuation process and the refrigerant charge for automatic operation. With the Smart Cart™, you can service non-automotive systems like motor home and camper A/C units.

The Smart Cart™ makes sure that the charge is accurate, dispensing refrigerant by weight.

The Smart Cart™ comes with the J 26695 rotary vane vacuum pump, an efficient 3 CFM size that quickly and thoroughly evacuates the system. Also included is a top quality manifold gauge set with two 96" color-coded quick seal hoses.

Specifications:

- Voltage 115V 60 Hz
- Refrigerant Capacity: R-12 or R-22 30 lb. bulk tank (max.)
- Vacuum Pump: 3 CFM with 20 micron factory rating
- Dimensions: 42" x 21" x 20"



J 34000-A AUTOMATIC AIR CONDITIONING CHARGING STATION

THE ULTIMATE A/C CHARGING STATION

This Automatic Air Conditioning Service Station is the perfect time saving tool for busy technicians. A compact, microprocessor controlled station that quickly and accurately evacuates and recharges air conditioning systems, with the push of a button. The serviceman is free to do other work while the service station cycles through the complete recharging sequence.

The station's microprocessor control center provides simple programming of the entire air conditioning service procedure. Using the touchpad keyboard, all required information such as vacuum, oil, and R-12 amounts as well as operational sequence are easily entered and controlled. The rugged steel cabinet has plenty of storage space and convenient features like the large gauge faces, 96" color-coded charging hoses, and both audio and visual operational signals. This is the state-of-the-art in air conditioning service equipment.

Operation sequence is closely monitored and displayed by three LED indicators. This display monitors each cycle for quick and easy reference.

Operating instructions with audio cassette included.

Specifications:

- Voltage: 115 V 60Hz
- Free Air Displacement: 1.2 C.F.M.
- Factory Micron Rating: 29.91" Hg 200 microns
- Vacuum Pump Oil Reservoir: 5 oz.
- Hoses: 96" Red - high side 96" Blue - low side w/quick seal fittings
- R-12 Capacity: 30 lbx. max. - bulk tank
- Refrigerant Oil Tank Capacity: 20 oz.
- Height: 44" • Width: 24-1/2" • Depth: 20"
- Accuracy: Electronic scale displays refrigerant to 1/100 lb. and oil to within 1/100 oz. and is not affected by temperature and pressure changes.



J 24410-A PORTABLE HIGH VACUUM CHARGING SYSTEM

A heavy-duty, high capacity, charging station designed for heavy vehicle maintenance, fleet service or large volume A/C systems. Unit is equipped with all components needed for fast, professional air conditioning service.

Features

- J 24364-B 5.0 CFM Vacuum Pump
- 10-lb. Heated Dial-A-Charge Cylinder
- Power Pack
- Electric Solenoid Controlled Vacuum Release
- Portable Heavy Duty Cart with 96" Long Quick Seal Hoses
- Complete Service Center



J 23500-01 PORTABLE CHARGING SYSTEM

A medium-sized, fully equipped, professional charging station perfect for A/C service of light trucks, panel trucks or other vehicles. Requires 5 lbs. or less refrigerant charge. High quality components are well matched under all service conditions.

Features

- J 26695-B 3.0 CFM Vacuum Pump
- 5-lb. Heated Dial-A-Charge Cylinder
- Power Pack
- Portable Heavy Duty Cart with 96" Long Quick Seal Hoses
- Complete Service Center

J 23900-B PORTABLE CHARGING STATION

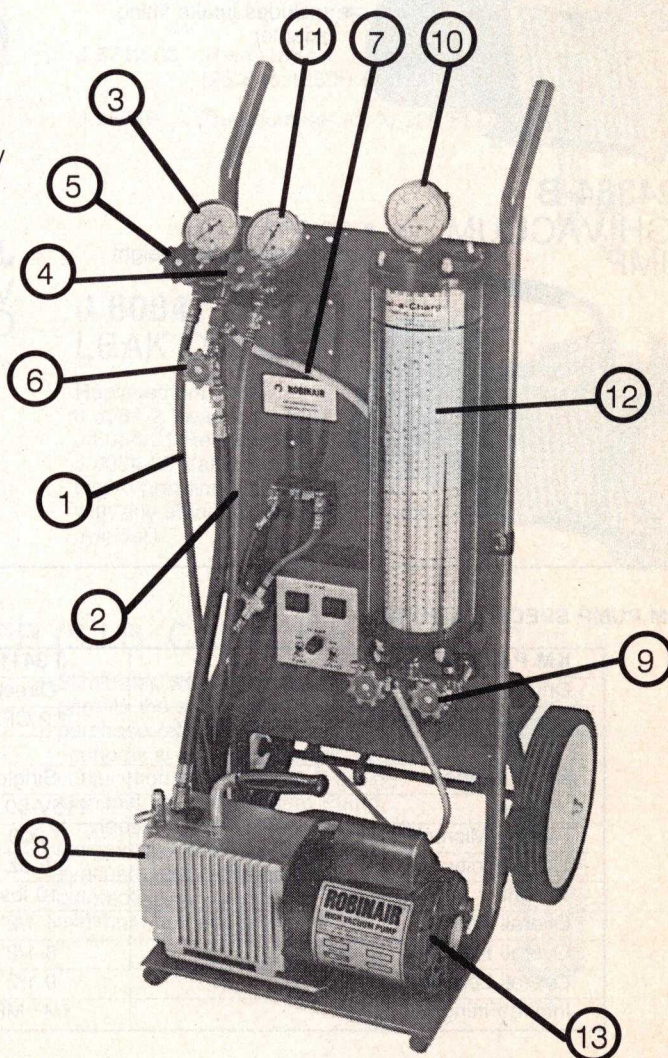
(same as J23500-01 but requires 220 volt 50 cycle current)

J 23500-01 SERVICE PARTS (SEE ILLUS.)

- | | |
|----------------|-------------------------------|
| 1. J 5418-72B | 72" Blue Line |
| 2. J 5418-72R | 72" Red Line |
| 3. J 5725-5 | Blue Compound Gauge |
| 4. J 23500-53 | Complete Manifold Less Gauges |
| 5. J 23500-54 | Valve Hand Wheel |
| 6. J 23500-55 | Pump Valve |
| 7. J 23500-58 | 24" Yellow Fill Hose |
| 8. J 23500-62 | Exhaust Filter |
| 9. J 23500-71 | Right and Left Valve |
| 10. J 23500-78 | Charging Cylinder Gauge |
| 11. J 23500-79 | Red Pressure Gauge |
| 12. J 23500-85 | Replacement Charger Cylinder |
| 13. J 26695-B | Vacuum Pump |

NOT SHOWN

- J 23500-10 Valve Stem O-Rings (10)
J 23500-72 Manifold Stem Assembly with Seals



AIR CONDITIONING

Each Kent-Moore (Robinair) Vacuum Pump is engineered to give years of solid performance. The RVP series features reliable offset rotary vane design and packs a lot of pump into a rugged, lightweight unit.

Years of experience in engineering and manufacturing of vacuum pumps enables Kent-Moore (Robinair) to produce the most advanced pumps in the service industry.

J 36843 A/C SERVICE MANUAL



This service manual and **system diagnosis chart** covers Air Conditioning Service, Theory, Introduction to Air Conditioning Service, Testing the System, Diagnosing the System, Servicing System Components and all Factory Air and Hang-on Systems. Includes compressor service procedures for many of today's applications.

RVP (ROTARY VANE) SERIES VACUUM PUMPS

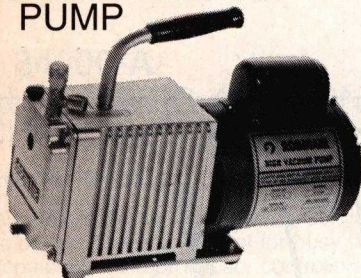
- High volume pumping efficiency
- Aircraft quality aluminum

- Rotary vane design
- Free floating design

- Gas ballast
- Lifetime filtration

- Axial motor coupling
- Thermal motor protection

J 26695-B HIGH VACUUM PUMP



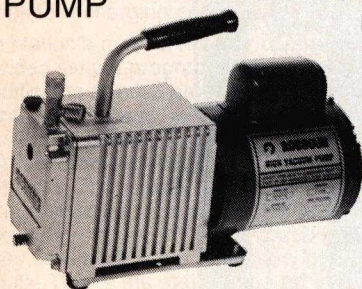
- 3.0 CFM
- Lightweight
- 10 oz. oil capacity
- The ultimate in high vacuum for professional A/C service
- Includes intake fitting adapter

J 34119 HIGH VACUUM PUMP



- 1.2 CFM
- Low cost electric pump
- Rugged design—built to last
- Serviceable

J 24364-B HIGH VACUUM PUMP



- 5.0 CFM
- High volume lightweight package

J 26695-5 VACUUM PUMP OIL (ONE QUART)

Push-pull dispenser top



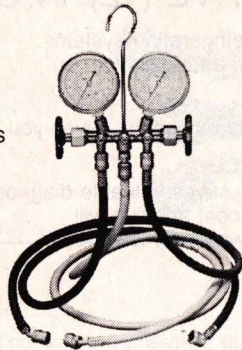
VACUUM PUMP SPECIFICATIONS

KM PART NO.	J 34119	J 26695-B	J 24364-B
Drive	Direct	Direct	Direct
Free Air Displacement	1.2 CFM	3.0 CFM	5.0 CFM
No. of Stages	Single	Single	Two
Voltage	115V-60 Cy.	115V-60 Cy.	115V-60 Cy.
Factory Micron Rating	200	50	20
Oil Capacity	5 oz.	10 oz.	13 oz.
Weight	10 lbs.	21 lbs.	23 lbs.
Overall Width	4 1/2"	5 1/2"	5 1/2"
Overall Height	8 1/2"	10"	16"
Overall Length	9 1/2"	13 1/4"	16"
Intake Fitting	1/4" MFL	1/2" or 1/4" Flare	1/2" or 1/4" Flare

TESTING & CHARGING

J 23575-B COMPLETE MANIFOLD ASSEMBLY

The ideal unit for testing, evacuating and recharging a system without disconnecting any hoses. All brass forged body — compact design for rugged use. Special quick seal fittings provide positive leak-proof shutoff. Maximum flow with 2 1/2 turns of the handle. Gauges are furnished with screw on hi-impact Lexan lenses. Includes two 35" and one 60" inch hose



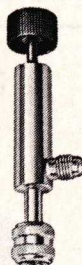
Manifold Service Parts for J 23575-01 version

J23500-10 Urethane "O" Rings (Package of 10) Fits all valves that use "O" Ring stem seals	J 5418-1 1/4" Gasket (Package of 6)
	J 5418-2 1/4" Valve Depressor (Package of 6)

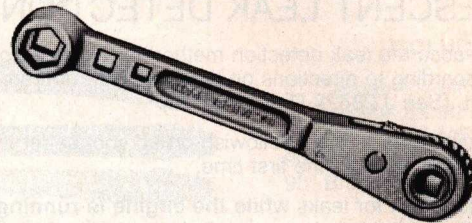
Note: It is recommended that current charging hoses be replaced with new Quick Seal hoses to prevent refrigerant release to the atmosphere. (See page 13.)

J 22132-02 ACCESS VALVE CORE REMOVER AND INSTALLER WITH 1/4" QUICK COUPLE PAT. NO. 3,299,648

Designed specifically for use when evacuating or recharging any system using valve core type access valves. This tool removes the valve core and holds it out of the way inside the tool to eliminate restriction and provide full flow. Use of this tool makes it possible to evacuate and recharge in half the time normally required. Replacement "O" Rings and gaskets furnished with tool.



J 6105 REVERSIBLE RATCHET WRENCH

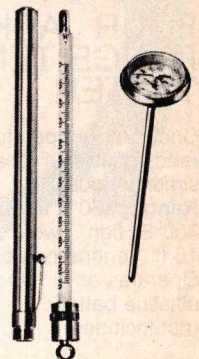


J 6105 features hex openings of 1/2" and 9/16" on one end and square openings of 3/16" and 1/4" on the other end for use on service valves. J 6105 opens and controls the flow on larger type refrigerant containers.

POCKET THERMOMETERS

Precision glass thermometers enclosed in protective metal cases with handy pocket clips. Metal tube dial thermometers supplied with pocket clip carrying case.

- J 5421-02 Thermometer (0° to 220° F). Glass
- J 22555 Thermometer (-50° to +120° F). Glass
- J 6742-03 Thermometer (25° F to 125° F) Dial
- J 23640 Thermometer (0° to 220° F) Dial



J 6084 LEAK DETECTOR

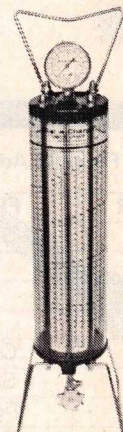
Replacement Parts
J 6084-2 Head Assembly
J 6084-21 Reaction Plate
J 6084-22 Valve Assembly
Liquid propane type leak detector. (Used with any standard propane 14.1 oz. cylinder)



J 24641 HEATED DIAL-A-CHARGE® CYLINDER (5 LB. CAPACITY)

The only portable device available designed to adjust for volume fluctuation in refrigerant caused by temperature changes. Calibrated for refrigerant 12 and 22 for accurate recharging of auto air conditioners and recreational vehicle air conditioners. The Dial-A-Charge with heating element provides a consistent positive pressure at the cylinder to overcome pressure equalization between the refrigerant source and the system being charged. This not only permits vapor charging in the low side but also increases speed of high side liquid charging. Eliminates possible reed valve and piston failure caused by improperly "slugging" the low side. Shut-Off valve at bottom of cylinder contains a teflon seat which provides finger-tip control while charging systems with the exact factory specified amount of refrigerant.

Eliminates wasted refrigerant and permits the service facility to purchase refrigerant in large economical drum containers. In conjunction with J 23575-B gauge manifold set and Vacuum Pump, provides the serviceman a complete inexpensive hook-up required to evacuate and recharge an automotive air conditioner in a minimum amount of time.



AIR CONDITIONING

TESTING & CHARGING (CONTINUED)

J 36790

FLUORESCENT LEAK DETECTION ADDITIVE (12) 14 OZ. CANS

A new, highly-accurate leak detection method for air conditioning and refrigeration systems. Simply add according to directions on the container, operate the system and scan with an ultraviolet light. (See J 28428-D on page 75)

A leak will show up as a bright yellowish-green spot under the light. It's that simple. Gives you the accuracy to do the job right the first time.

It allows you to check for leaks **while the engine is running!** This also saves valuable diagnostic time by permitting service in any normal shop environment. The fluorescent additive will harmlessly circulate throughout the system and appear under the light wherever leaks exist. Leaks at seals, fittings, even the smallest "pin-holes" can be spotted.

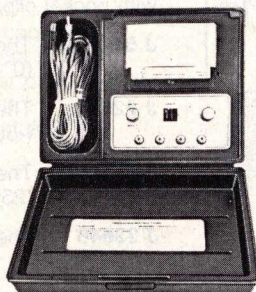


J 21213-A

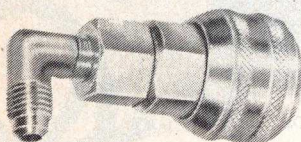
FOUR JACK-DUAL RANGE TEMPERATURE TESTER

Check for temperature readings in four locations simultaneously.

Range: -50°F to 100°F to 300°F High. Two J 21213-5 15 ft. general purpose leads. Operates on 1 "D" cell alkaline battery. (not included)



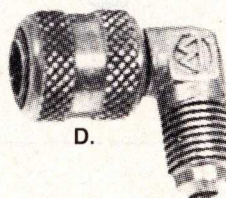
ACCESS VALVES, ADAPTERS & HOSES



A. Quick Coupler Type Fitting



C.



D.



B. Flexible Adapters



E. Brass Adapters



F.

Service Parts

(6 pieces per pkg.)

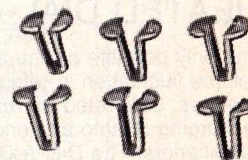
J 5418 1/4" Gasket

J 25498-3 3/16" Gasket



J25498-2B 3/16" Valve depressor

J 5418-2 1/4" Valve depressor



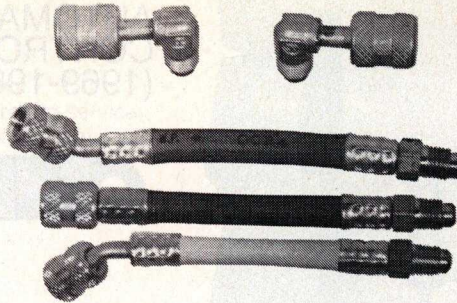
NUMBER	FITTING TYPE	DIMENSIONS	THREAD SIZE	GM	STYLE
J 25498-A	Straight Brass	1/4 MFL x 3/16 FFL	3/8-24	'77 and Later	C
J 25499-A	90° Brass	1/4 MFL x 3/16 FFL	3/8-24	'77 and Later	D
J 34122-A	6" Flexible	1/4 MFL x 3/16 FFL	3/8-24	'77 and Later	B
J 34123	6" Flexible	1/4 MFL x 1/4 FFL	7/16-20	'76 and Prior	B
J 34124	Quick Coupler	1/4 MFL x 3/16	—	'78 and Later	A
J 5420	Straight Brass	1/4 MFL x 1/4 FFL	7/16-20	'76 and Prior	C
J 24556-B	Tight 90° Brass	1/4 MFL x 1/4 FFL	7/16-20	Corvette	E
J 38702	Straight Brass	1/4 MFL x 3/16 FFL	3/8-24	'91 A, F, U, W Cars	F

ACCESS VALVES, ADAPTERS & HOSES (CONTINUED)

J 36846

"FITS ALL" ADAPTER KIT

Used to hook-up high side of vehicle air conditioning system. Fits all makes, all models.



INCLUDES

- 6" Flexible 1/4 MFL x 1/4 FFL
- 6" Flexible 1/4 MFL x 3/16 FFL
- 6" Flexible 1/4 MFL x 1/8 FFL
- 90° Brass 1/4 MFL x 3/16 FFL
- 90° Brass 1/4 MFL x 1/4 FFL

CHARGING HOSES

This quality hose is capable of withstanding working pressure up to 500 P.S.I. with an average burst pressure of 2,000 P.S.I. Blue and yellow hoses now include quick seal valves to prevent the release of refrigerant to the atmosphere. The red hoses have a manual valve for this purpose.

Single Hoses (1/4" Brass Fittings)

Hose Length	Red/HighSide	Blue/Low Side	Yellow
36"	J 5418-36R	J 5418-36B	J 5418-36Y
72"	J 5418-72R	J 5418-72B	J 5418-72Y
96"	J 5418-96R	J 5418-96B	J 5418-96Y

SERVICE PARTS FOR NON-QUICK SEAL HOSES:

J 5418-1 1/4" Gasket (package of 6)

J 5418-2 1/4" Valve Depressor (package of 6)



NOTE: It is recommended that current charging hoses be replaced with new quick seal type hoses to prevent the release of refrigerant to the atmosphere.

GENERAL SERVICE TOOLS

J 36847

FIN STRAIGHTENER

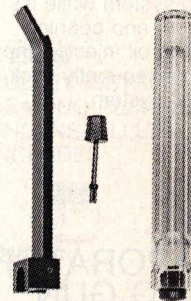
Six fin straighteners in one — 6 in 1 — will clean and straighten condenser and evaporator coil fins having spacings of 8, 9, 10, 12, 14 and 15 fins per inch. Small, compact, easy to use in confined spaces.



J 24182

V.I.R. SERVICE TOOL SET

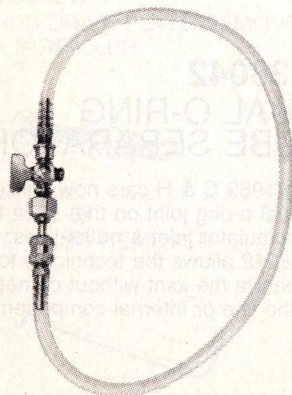
This service set includes three special tools: J 24182-1 for removal of the POA-STV valve and expansion valve. J 24182-2 for removal and installation of the Schrader valve cores: and J 24182-3 to install the suction tube retaining ring.



J 24095

COMPRESSOR OIL INJECTOR

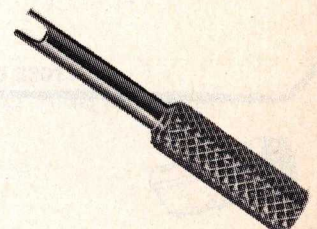
J 24095 Oil injector is used while evacuating the air conditioning system. The oil is drawn into the low side of the system while evacuating on the high side. This allows the technician to charge oil into the system.



J 34611

A/C VALVE CORE TOOL

J 34611 is required to service the larger valve core used on some GM AC systems.

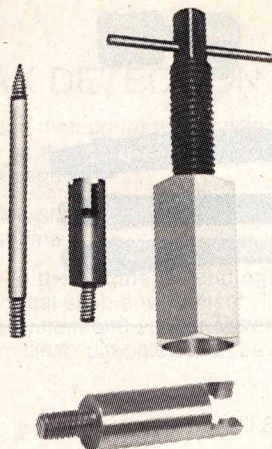


AIR CONDITIONING

GENERAL SERVICE TOOLS (CONTINUED)

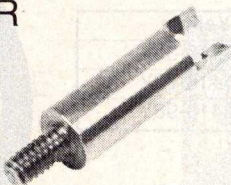
J 26549-E ORIFICE TUBE REMOVER AND EXTRACTOR

The cycling clutch air conditioning system has a screened orifice that requires the use of this puller for removal. This new improved design includes all the necessary pieces to remove the complete orifice tube or extract a damaged one, plus complete instructions and handy storage pouch.



J 26549-89 ORIFICE TUBE REMOVER ADAPTER (Inc. w/ J 26549-E)

1989 J, L, N-Cars



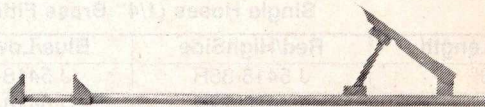
J 21530 AUTOMATIC TEMPERATURE CONTROL KNOB ADJUSTER (1969-1982)



This tool permits easy adjustments of the automatic temperature control knob without its removal from the instrument panel.

J 37097 MUBEA HOSE CLAMP TOOL

88-CURRENT C/H-CAR HEATER HOSES



A new style hose clamp which provides a constant force on the connection is now being used on many new GM vehicles. Accessibility to the heater hose clamps on the C/H-Car is limited. J 37097 is used to reach these clamps for removal and installation. The tool has a clamp locking feature and can be used to rotate the clamp ears for proper positioning.

J 38508 OIL INJECTOR

This system makes it simple to add refrigeration oil to an A/C system during servicing. By pulling oil into system while it's under a vacuum and opening the valve on the oil injector, the vacuum will consequently suck oil into the A/C system.



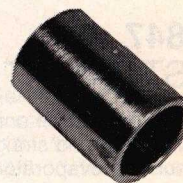
J 36645 A/C EVAPORATOR CLEANING GUN

Late model C, J, E, K, and H vehicles are equipped with a new style evaporator which can be cleaned easily with J 36645, thus eliminating unpleasant odors from entering the passenger compartment due to a dirty evaporator.



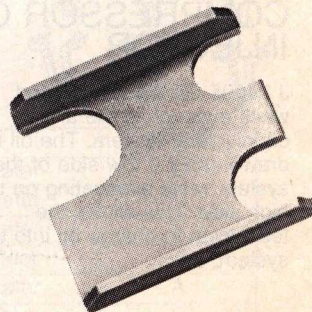
J 38704 CHARGE VALVE OCTAGON SOCKET

(1991 "Positive Seal" High Side Charge Valve)
On many 1991 vehicles the high side A/C charge valve assembly is a serviceable part. J 38704 is a special socket which is used to remove and install the valve assembly. Use of standard tools such as a vise grip could distort the sealing surface creating a potential refrigerant leak.



J 38042 DUAL O-RING TUBE SEPARATOR

The 1989 C & H cars now utilize a dual o-ring joint on the accumulator inlet & outlet lines. J 38042 allows the technician to separate the joint without damage to the line or internal components.

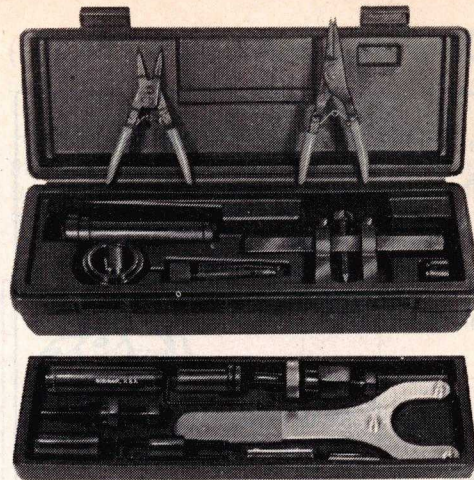



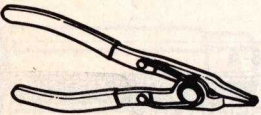
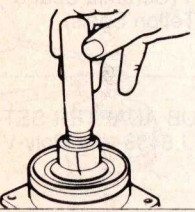

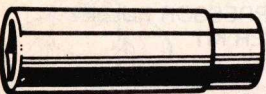
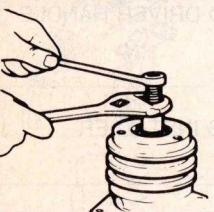
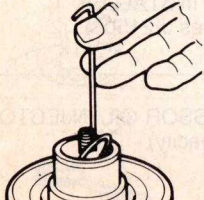
GM A-6 COMPRESSOR




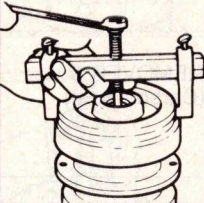
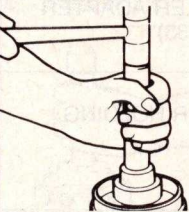
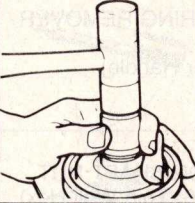

J 29888

GM A-6 CYLINDER (A-6) COMPRESSOR TOOL KIT

This kit is a collection of all the special tools required to service the A-6 Compressor Clutch, Clutch Bearing and Shaft Seal. J 29888 includes all tools shown on this page.





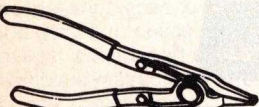


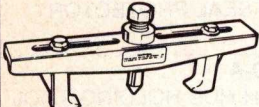
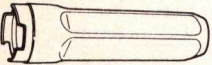
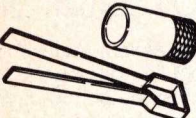

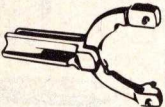

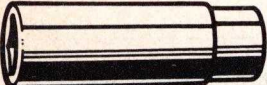

	J 5403 INTERNAL SNAP RING PLIERS (.038" Dia. Straight Tip)
	J 6083 EXTERNAL SNAP RING PLIERS (.070" Dia. Straight Tip)
	J 9392-01 SEAL ASSEMBLY REMOVER AND INSTALLER
	J 9393-A SEAL SEAT REMOVER & INSTALLER
	J 9399-A COMPRESSOR SHAFT NUT SOCKET
	J 9401-B HUB DRIVE PLATE REMOVER & INSTALLER
	J 9553-01 "O" RING REMOVER



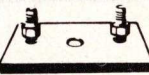

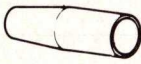
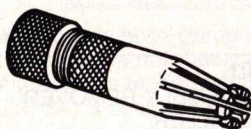
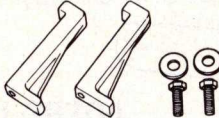
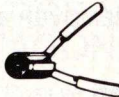

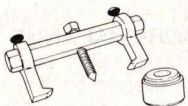

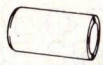


	J 23128-A CERAMIC SEAL REMOVER AND INSTALLER
	J 22974-A SHAFT SEAL PROTECTOR
	J 25030-A CLUTCH HUB HOLDING TOOL
	J 29884 PULLEY PULLER KIT
	J 29885 PULLEY INSTALLER— BEARING REMOVER AND INSTALLER KIT INCLUDES: J 9481-A J 9398-A J 29886
	J 29887 SNAP RING INSTALLER
	J 33011 "O" RING INSTALLER

TOOLS SHOWN ABOVE ARE ALSO AVAILABLE INDIVIDUALLY

AIR CONDITIONING

GM A-6 COMPRESSOR (CONTINUED)

	J 5139 OIL PICK-UP TUBE REMOVER
	J 5403 SNAP RING PLIERS (#21 Internal) .038" Dia. Straight Tip
	J 6083 SNAP RING PLIERS (#24 External) .070" Dia. Straight Tip
	J 6435 SNAP RING PLIERS (#26 External) .115" Dia. Straight Tip
	J 8001 DIAL INDICATOR SET (.001" Increments-.200" Travel)
	J 8433 HEAVY DUTY PULLEY PULLER (Use with J 9395)
	J 9392-01 SHAFT SEAL REMOVER & INSTALLER
	J 9393-A SEAL SEAT REMOVER & INSTALLER (Carbon Seat)
	J 9395 PULLEY PULLER ADAPTER (Use with J 8433)
	J 9396 COMPRESSOR HOLDING FIXTURE
	J 9398-A PULLEY BEARING REMOVER (Used with J 29886 Driver Handle)
	J 9399-A COMPRESSOR SHAFT NUT SOCKET (9/16" Thin Wall Hex)
	J 9401-B HUB & CLUTCH DRIVE PLATE ASSEMBLY REMOVER AND INSTALLER

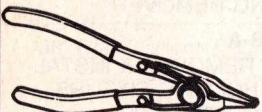
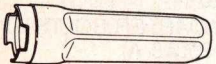
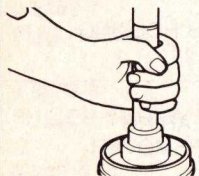

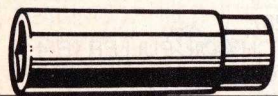
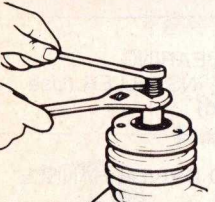


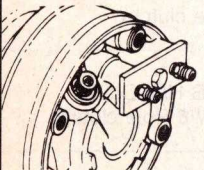

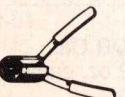
	J 9481-A PULLEY BEARING & PULLEY INSTALLER (Used with J 29886 Driver Handle)
	J 9553-01 "O" RING REMOVER
	J 9625-A PRESSURE TEST SET WITH SCHRADER VALVES
	J 21352-A COMPRESSOR SUPPORT BLOCK
	J 22974-A COMPRESSOR SHAFT OIL SEAL PROTECTOR (Two piece ceramic & carbon seals)
	J 23128-A COMPRESSOR SHAFT SEAL SEAT REMOVER & INSTALLER (Ceramic Seat & One-piece Teflon Seals)
	J 24092 PULLEY HUB ADAPTER SET (Used with J 8433 - for Poly-V-Belt)
	J 24340 RETAINING RING PLIERS (Shaft seal)
	J 25030-A CLUTCH HUB HOLDING TOOL
	J 29884 COMPRESSOR PULLEY PULLER KIT
	J 29886 THREADED DRIVER HANDLE
	J 29887 SNAP RING INSTALLER
	J 33011 "O" RING INSTALLER (Supercedes J 21508)
	J 38508 COMPRESSOR OIL INJECTOR (7 oz. Capacity)

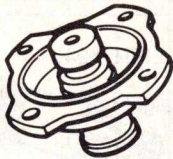
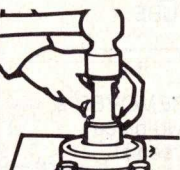
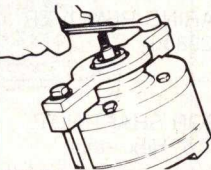

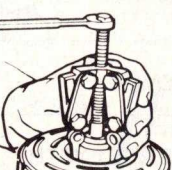
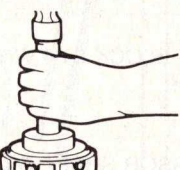



GM R-4 COMPRESSOR

J 29892-A

GM 4 CYLINDER (R-4) COMPRESSOR TOOL KIT

This kit is a collection of all the special tools required to service the standard R-4 Compressor Clutch, Clutch Bearing, and Shaft Seal. J 29892-A includes all items shown on this page. (See complete R-4 tool listing for 6/pole clutch on following page)

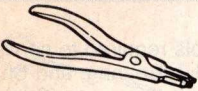

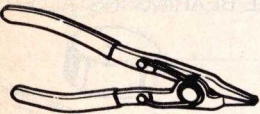

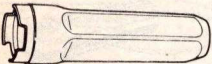

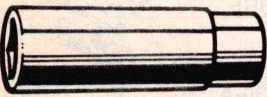



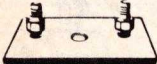


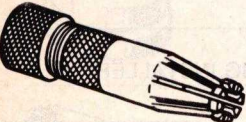
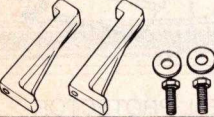
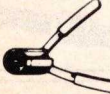
	J 6083 EXTERNAL SNAP RING PLIERS (.070" Dia. straight tip)
	J 9392-01 SHAFT SEAL REMOVER & INSTALLER
	J 9398-A ROTOR BEARING REMOVER
	J 9481-A PULLEY BEARING & PULLEY INSTALLER
	J 9399-A SHAFT NUT SOCKET
	J 9401-B HUB & DRIVER PLATE REMOVER & INSTALLER
	J 9481-A PULLEY BEARING & PULLEY INSTALLER (Used with J 29886 Driver Handle)
	J 9553-01 "O"RING REMOVER
	J 9625-A PRESSURE TEST SET
	J 23128-A SEAL & SEAL SEAT REMOVER
	J 24340 RETAINING RING PLIERS


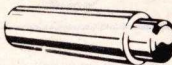

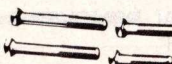

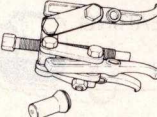
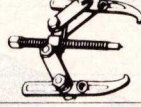


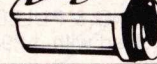




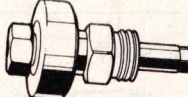


	J 24895 NEEDLE BEARING INSTALLER
	J 24896 NEEDLE BEARING REMOVER
	J 25008-A COMPRESSOR SHELL REMOVER, INSTALLER & HOLDING FIXTURE
	J 25030-A CLUTCH HUB HOLDING TOOL
	J 25031 ROTOR & BEARING PULLER
	J 26271-A ROTOR & BEARING ASSEMBLY INSTALLER
	J 29886 DRIVER HANDLE
	J 33011 "O" RING INSTALLER
	J 34614 SHAFT SEAL PROTECTOR

TOOLS SHOWN ABOVE ARE ALSO AVAILABLE INDIVIDUALLY

AIR CONDITIONING

GM R-4 COMPRESSOR (CONTINUED)

	J 4245 SNAP RING PLIERS #23 INTERNAL (.070" Dia. straight tip)
	J 5403 SNAP RING PLIER #21 INTERNAL (.038" Dia. straight tip)
	J 6083 SNAP RING PLIER #24 EXTERNAL (.070" Dia. straight tip)
	J 5139 OIL PICK-UP TUBE REMOVER
	J 9392-01 SHAFT SEAL REMOVER & INSTALLER (Two-piece ceramic/carbon seals)
	J 9398-A ROTOR BEARING REMOVER (Use with J 29886)
	J 9399-A COMPRESSOR SHAFT NUT SOCKET (9/16" Hex—thin wall)
	J 9401-B HUB & CLUTCH DRIVE PLATE ASSY. REMOVER & INSTALLER
	J 9481-A PULLEY BEARING & PULLEY INSTALLER (Use with J 29886)
	J 9553-01 "O" RING REMOVER
	J 9625-A PRESSURE TEST SET WITH SCHRADER VALVES
	J 21352-A SUPPORT BLOCK (R-4 W/6 pole clutch)
	J 22974-A COMPRESSOR SHAFT OIL SEAL PROTECTOR (For 2 piece ceramic/carbon seals)
	J 23128-A COMPRESSOR SHAFT SEAL REMOVER & INSTALLER (Ceramic seal & one piece teflon seal)
	J 24092 CLUTCH COIL PULLER LEGS (Poly-V Belt) Use with J 8433
	J 24340 SHAFT SEAL RETAINING RING PLIERS

	J 24895 FRONT HEAD NEEDLE BEARING INSTALLER
	J 24896 FRONT HEAD NEEDLE BEARING REMOVER
	J 25008-A SHELL REMOVER & INSTAL- LER & HOLDING FIXTURE (Includes J 25008-20)
	J 25008-20 METRIC ADAPTER BOLTS (Part of J 25008-A)
	J 25030-A CLUTCH HUB HOLDING TOOL
	J 25031 ROTOR & BEARING ASSEMBLY REMOVER
	J 25287 CLUTCH COIL PULLER (R-4 W/6 Pole clutch or poly-V Belt)
	J 26271-A ROTOR & BEARING ASSEMBLY INSTALLER (Use with J 29886)
	J 29886 THREADED DRIVER HANDLE
	J 33011 "O" RING INSTALLER (Supersedes J 21508)
	J 33019 BEARING STAKING TOOL (R-4 W/6 Pole clutch)
	J 33020 PULLEY PULLER (R-4 W/6 Pole clutch) Use with J 25031-1)
	J 33024 CLUTCH COIL INSTALLER (R-4 W/6 Pole clutch)
	J 33027-A CLUTCH HUB HOLDING TOOL (R-4 W/6 Pole clutch)
	J 37707 HUB & DRIVE PLATE REMOV- ER & INSTALLER (R-4 W/6 Pole clutch, M22 shaft thd.)
	J 34614 SHAFT SEAL PROTECTOR (For one piece teflon seals 1984 to current)
	J 38508 COMPRESSOR OIL INJECTOR (2 oz. capacity)

GM DA-6 & HR-6-HE COMPRESSOR

J 34021-A

GM 6 CYLINDER (DA-6 & HR-6) COMPRESSOR TOOL KIT

This kit includes all of the special tools required to service the DA and HR-6 Compressors. J 34021-A includes all items shown on this page. All tools also available individually.

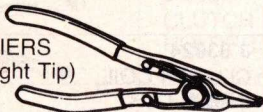
J 5403

INTERNAL SNAP RING PLIERS
(.038" Dia. Straight Tip)



J 6083

EXTERNAL SNAP RING PLIERS
(.070" Dia. Straight Tip)



J 8433-1

PULLER BAR



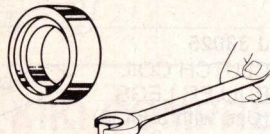
J 8433-3

PULLER SCREW



J 33017

PULLEY & BEARING ASSEMBLY INSTALLER



J 33023-A
PULLER PILOT

J 9398-A

PULLEY BEARING REMOVER
(Use with J 29886)

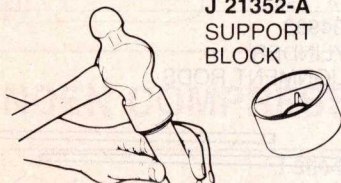


J 9481-A

PULLEY BEARING INSTALLER
(Use with J 29886)

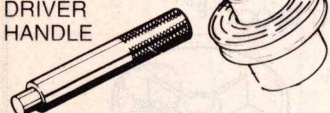


J 21352-A
SUPPORT BLOCK



J 29886

DRIVER HANDLE



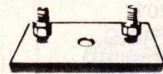
J 9553-01

"O" RING REMOVER



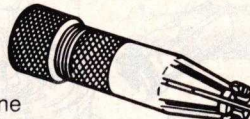
J 9625-A

PRESSURE TEST PLATE



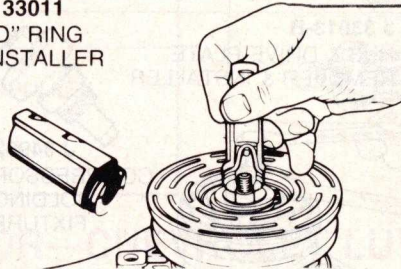
J 23128-A

SEAL SEAT REMOVER AND INSTALLER
(Also removes one piece teflon seal)



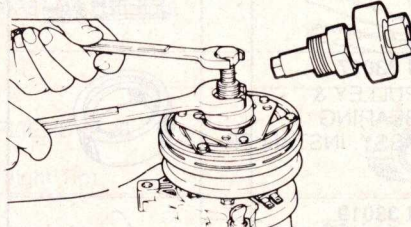
J 33011

"O" RING INSTALLER



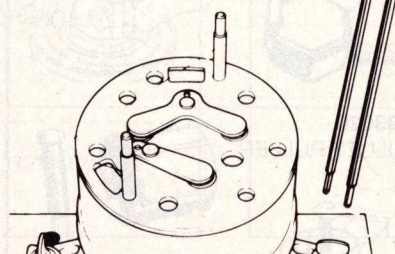
J 33013-B

HUB & DRIVE PLATE REMOVER & INSTALLER



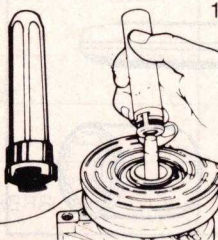
J 33016

CYLINDER ALIGNMENT RODS



J 33018-A

SEAL ASSEMBLY REMOVER & INSTALLER



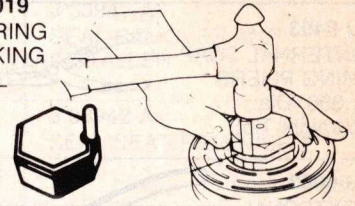
J 33021

SHAFT SEAL PROTECTOR
2 pc. Ceramic/Carbon Seal
1982-85



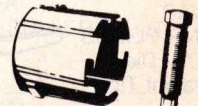
J 33019

BEARING STAKING TOOL



J 33020

PULLEY PULLER



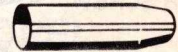
J 33026

COMPRESSOR HOLDING FIXTURE



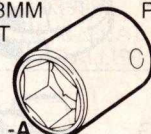
J 33021

SHAFT SEAL PROTECTOR



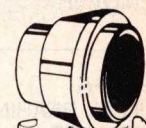
J 33022

6 PT. 13MM SOCKET



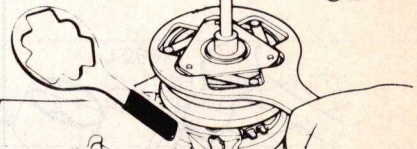
J 33023-A

PULLER PILOT



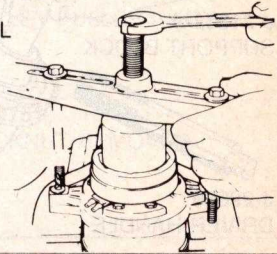
J 33027 -A

CLUTCH HUB HOLDING TOOL



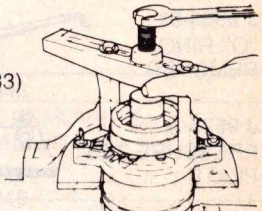
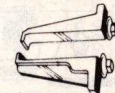
J 33024

CLUTCH COIL INSTALLER ADAPTER
(Use with J 8433)



J 33025

CLUTCH COIL PULLER LEGS
(Use with J 8433)



J 34614

SHAFT SEAL PROTECTOR

(Ultra smooth finish) - for one piece teflon seals 1984 to current



TOOLS SHOWN ABOVE ARE ALSO AVAILABLE INDIVIDUALLY

AIR CONDITIONING

GM V-5 COMPRESSOR

J 35610

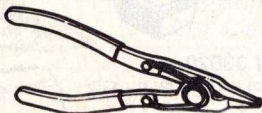
GM V-5 COMPRESSOR TOOL KIT

This kit includes all of the special tools required to service the V-5 Compressor. J 35610 includes all items shown on this page. All tools also available individually.

J 5403
INTERNAL SNAP
RING PLIERS
(.038" Dia.
Straight Tip)



J 6083
EXTERNAL SNAP
RING PLIERS
(.070" Dia.
Straight Tip)



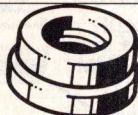
J 8433-1
PULLER
BAR



J 8433-3
PULLER SCREW



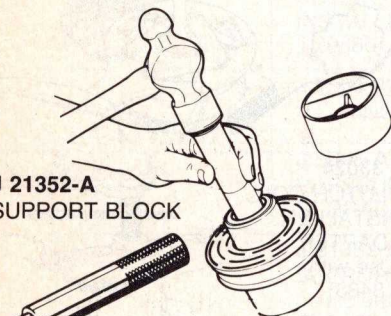
J 9398-A
PULLEY BEARING
REMOVER



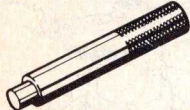
J 9481-A
PULLEY BEARING
INSTALLER



J 21352-A
SUPPORT BLOCK



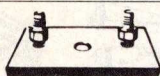
J 29886
DRIVER HANDLE



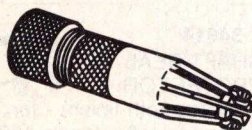
J 9553-01
"O" RING
REMOVER



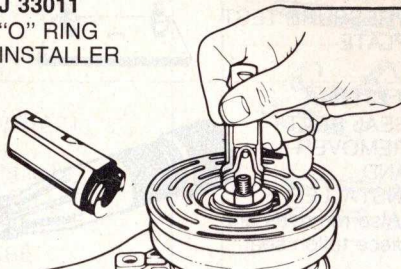
J 9625-A
PRESSURE TEST
PLATE



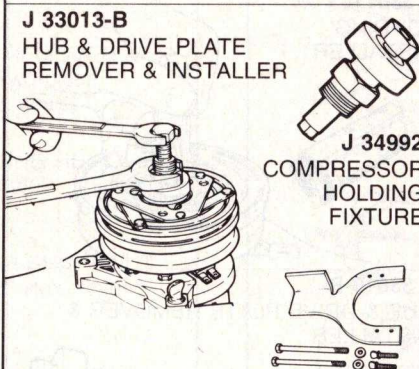
J 23128-A
SEAL
REMOVER &
INSTALLER



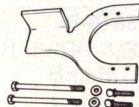
J 33011
"O" RING
INSTALLER



J 33013-B
HUB & DRIVE PLATE
REMOVER & INSTALLER



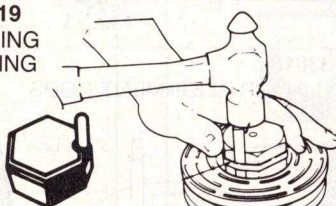
J 34992
COMPRESSOR
HOLDING
FIXTURE



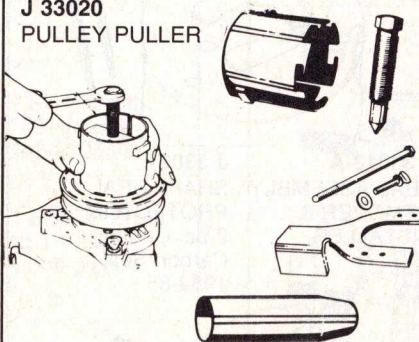
J 33017
PULLEY &
BEARING
ASSY. INSTALLER



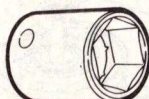
J 33019
BEARING
STAKING
TOOL



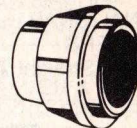
J 33020
PULLEY PULLER



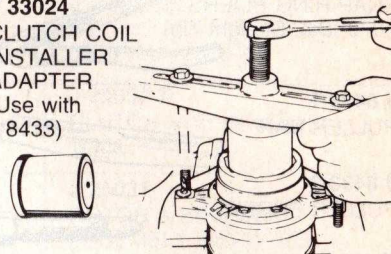
J 33032
6 POINT 13MM
SOCKET



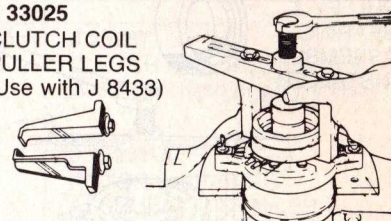
J 33023-A
PULLER PILOT



J 33024
CLUTCH COIL
INSTALLER
ADAPTER
(Use with
J 8433)



J 33025
CLUTCH COIL
PULLER LEGS
(Use with J 8433)



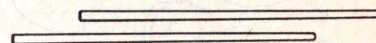
J 33027-A
CLUTCH HUB
HOLDING TOOL



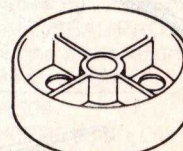
J 34614
SHAFT SEAL
PROTECTOR



J 34993
CYLINDER
ALIGNMENT RODS



J 35372
SUPPORT BLOCK



TOOLS SHOWN ABOVE ARE ALSO AVAILABLE INDIVIDUALLY

AIR CONDITIONING

DIESEL KIKI COMPRESSOR—SPECTRUM

	J 5403 SNAP RING PLIERS (#21 INTERNAL) (.038" Dia. Straight Tip)
	J 6435 SNAP RING PLIERS (#26 EXTERNAL) (.115" Dia. Straight Tip)
	J 7624 CLUTCH DRIVE PLATE HOLDER
	J 8092 DRIVER HANDLE
	J 8433 COMPRESSOR PULLEY PULLER

	J 33940-A PULLEY AND BEARING ASSEMBLY INSTALLER
	J 33941-A SEAL REMOVER AND INSTALLER
	J 33942-A SEAL SEAT REMOVER
	J 33943-A PULLEY PULLER PILOT
	J 33944-A CLUTCH PLATE REMOVER

DIESEL KIKI COMPRESSOR—CHEVROLET LUV—BUICK OPEL

	J 5403 SNAP RING PLIERS (#21 INTERNAL) (.038" Dia. Straight Tip)
	J 6435 SNAP RING PLIERS (#26 EXTERNAL) (.115" Dia. Straight Tip)
	J 7624 CLUTCH DRIVE PLATE HOLDER
	J 8433 COMPRESSOR PULLEY PULLER
	J 9392-01 SHAFT SEAL REMOVER & INSTALLER

	J 9393-A SEAL SEAT REMOVER & INSTALLER
	J 9519-17 BEARING REMOVER
	J 26571 CLUTCH DRIVE PLATE PULLER
	J 26720-A PULLEY PULLER PILOT
	J 29751 LOCKNUT REMOVER

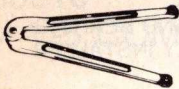
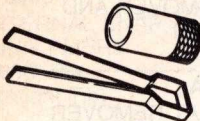
SANDEN COMPRESSOR—CHEVROLET SPRINT


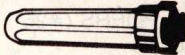
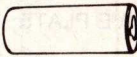
	J 36045 PULLER PLATE ASSEMBLY
	J 36046 PULLER PILOT
	J 36047 PULLER FINGERS (Includes 2)

	J 36048 SEAL REMOVER & INSTALLER
	J 36049 SEAL PROTECTOR
	J 36050 BEARING REMOVER AND INSTALLER

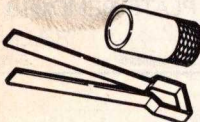
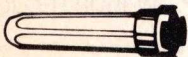
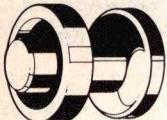
AIR CONDITIONING

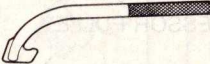
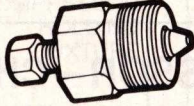
NIPPONDENSO COMPRESSOR—SPRINT

	J 7624 CLUTCH DRIVE PLATE HOLDER
	J 9393-A SEAL SEAT REMOVER



	J 34878 PRESSURE PLATE REMOVER
	J 34879 SHAFT SEAL REMOVER
	J 34880 KEY PRESSOR


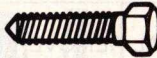
NIPPONDENSO COMPRESSOR—CHEVROLET NOVA

	J 9393-A SHAFT SEAL PLATE REMOVER
	J 34879 SHAFT SEAL REMOVER AND INSTALLER
	J 35400 PULLEY BEARING REMOVER AND INSTALLER

	J 35740 CLUTCH HOLDER
	J 35741 CLUTCH HUB REMOVER

NIPPONDENSO COMPRESSOR—1988 TO CURRENT CHEVROLET CORVETTE

	J 9443-01 "O" RING REMOVER
	J 33027-A CLUTCH HUB HOLDING TOOL

	J 34614 SHAFT SEAL PROTECTOR
	J 37252 CLUTCH PLATE REMOVING TOOL (1988 Corvette only)

ROBINAIR TO KENT-MOORE CROSS REFERENCE

Robinair Number	Kent-Moore Number	Robinair Number	Kent-Moore Number	Robinair Number	Kent-Moore Number
10237	J 36846	10921	J 25030	40062	J 5418-60Y
10239	J 23600-B	10921	J 33027	40064	J 5418-72B
10295	J 37699	10929	J 34019	40066	J 5418-72R
10317	J 9625-A	10961	J 34124	40068	J 5418-72Y
10330	J 29642-C	10972-A	J 26549-E	40073	J 5418-96B
10416	J 9399	10972-6	J 26549-89	40074	J 5418-96R
10468-A	J 25498-A	10975	J 24410-A	40076	J 5418-96Y
10469-B	J 25499-A	10985	J 34000-A	40082	J 5418-2
10470-A	J 34122-A	10987	J 34611	40083	J 5418-1
10471	J 25031	11000	J 6271-01	40114	J 23500-72
10472	J 26271-A	11004	J 6272-02	40138	J 23500-53
10482	J 25008-A	11692	J 23500-51	40155	J 23575-01
10483	J 24895	11693	J 23500-79	40560	J 5420
10484	J 24896	12008	J 5453	40563	J 9459
10500	J 29888	12077	J 22555	40653-A	J 25498-2A
10501	J 29884	12084	J 5421-02	40677	J 25498-3
10502	J 29885	13203	J 26695-5	40680	J 33023-A
10503	J 9392-01	14226	J 25563	40682	J 29886
10504	J 9401-B	14264	J 23500-78	41060	J 22974-A
10507	J 9393-A	14401	J 36847	41064	J 33026
10508	J 9553-01	14528	J 25310	41065	J 33011
10509	J 21508-A	14840	J 21213-A	41066	J 21352-A
10510	J 29887	14970	J 29547	41067	J 33013-B
10513	J 23128-A	15100	J 34119	41068	J 33016
10515	J 22132-02	15101-B	J 24364-B	41070	J 33018-A
10538	J 6084	15102-B	J 26695-B	41071	J 33019
10559	J 6105	17350	J 38100-B	41072	J 33020
10561	J 36843	31036	J 5418-36Y	41074	J 33024
10569	J 6742-02	31048	J 5418-48Y	43287	J 23500-80
10576	J 38508	32036	J 5418-36B	43291	J 23500-73
10597	J 23640	33036	J 5418-36R	43584	J 23500-71
10598	J 24182	40037	J 5418-36B	43678-A	J 24641
10683	J 24340	40042	J 5418-36R	44362	J 23500-62
10747	J 23500-68	40044	J 5418-36Y	44703	J 23500-3
10778	J 34123	40050	J 5418-48B	44704	J 23500-30
10786	J 29640	40052	J 5418-48R	45102	J 29547-3
10854	J 23500-01	40059	J 5418-60B	46570	J 29547-1
10861	J 9401-B	40060	J 5418-60R	46571	J 29547-2
10916	J 29642-12				

STEERING

GENERAL DIAGNOSIS

J 25323-A POWER STEERING SYSTEM ANALYZER

This test device measures both flow and pressure enabling the technician to quickly diagnose power steering system malfunctions. J 25323-A is designed to be installed quickly and simply at either the pump output or steering gear input connection. Complete instructions for use and test specifications are included. Unit adapts to all standard GM O-ring type hydraulic line connectors. For flare type fitting, and quick disconnect fitting see J 25323-10.

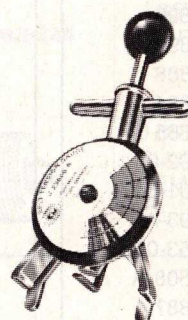
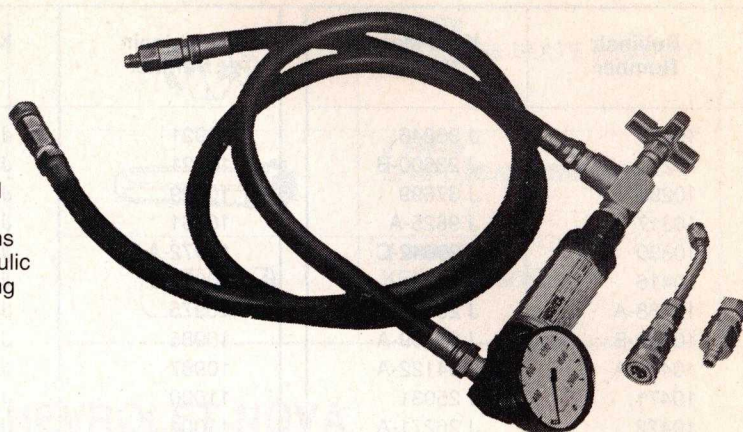
Includes:

J 28579 16mm Adapter
All GM 1980-current FWD with rack and pinion steering.

J 29525 18mm Adapter
GM 1980 current, except FWD with rack and pinion steering.

J 23600-B BELT TENSION GAUGE

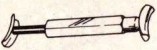
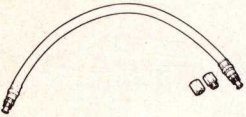
J 23600-B is used to adjust accessory drive belt tension on all standard automotive applications. Correct tension increases belt and bearing life and improves accessory efficiency. The face of this gauge is color coded to give the operator a guide for proper tension. The dial range is 30 to 180 pounds and 130 to 800 Newtons (dual scale).

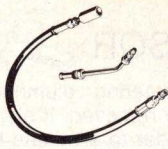


	J 5176-D POWER STEERING PRESSURE TESTER 0-2000 P.S.I. - (Includes J 5176-5 & J 5176-20)
	J 5176-5 16MM POWER STEERING GAUGE ADAPTER (Used and included with J 5176-D) (O-Ring type fitting)/All GM 1980 to current front wheel drive with rack and pinion steering.
	J 5176-20 18MM POWER STEERING GAUGE ADAPTER (Used and included with J 5176-D) All GM 1980 to current except front wheel drive with rack and pinion steering.
	J 7715 UNIVERSAL PRESSURE GAUGE 0-2000 P.S.I. (Component of J 5176-D)
	J 22326 POWER STEERING GAUGE ADAPTER 1965 THRU 1980 (Component of J 5176-D)

	J 25323-10 POWER STEERING ANALYZER ADAPTER (Use with J 25323-A) All GM flare type hydraulic line connectors 1980 and prior.
	J 28579 POWER STEERING ANALYZER 16MM ADAPTER (Use with J 25323-A)/All GM 1980 to current front wheel drive with rack and pinion steering.
	J 29525 POWER STEERING ANALYZER 18MM ADAPTER (Use with J 25323-A)/All GM 1980 to current except front wheel drive with rack and pinion steering.
	J 29122 UNIVERSAL POWER STEERING LINE WRENCH (18mm - 3/8 dr.)
	J 29550 V-BELT TENSION GAUGE

GENERAL DIAGNOSIS (CONTINUED)

	J 29661 UNIVERSAL BELT TENSION ADJUSTER
	J 35465 POWER RACK AND PINION PRESSURE GAUGE ADAPTERS- 1985 to current S-car (Nova, Storm) (Used with J 5176-D)

	J 38391 POWER STEERING PRESSURE TEST ADAPTER (ZR-1 Corvette, use with J 5176-D)
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STEERING WHEEL

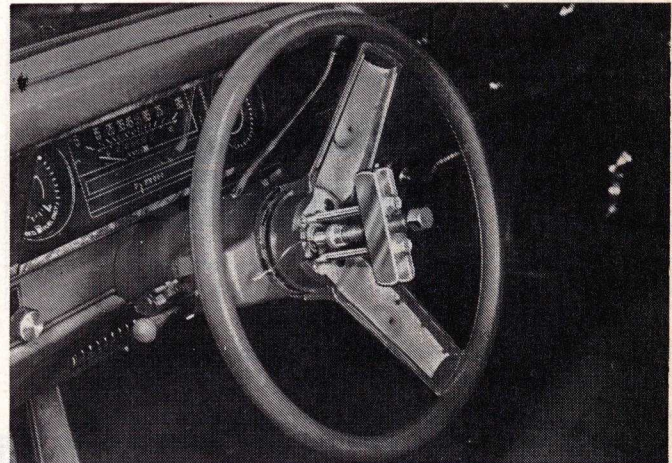
J 1859-A STEERING WHEEL PULLER

This puller incorporates a center screw with a swivel to reduce required torque and a 4" wide slotted cross arm for maximum adjustment. Includes five sets of side screws in the sizes needed to adapt to most General Motors steering wheels. See Chart.

Included Side Screws

Qty	Number	Thread	Length
1	J 38720	5/16" - 18	4"*
2	J 1859-20	5/16" - 24	3-1/2"
2	J 1859-30	3/8" - 16	4"
2	J 1859-60	1/4" - 28	3"
2	J 1859-80	M8 - 1.25	80mm

*(Use on S.I.R.—Supplemental Inflatable Restraint—applications)



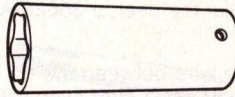
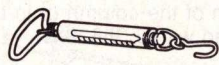

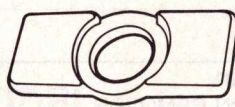
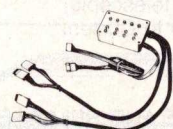
J 35630

HORN TOWER TEST ADAPTER

Pontiac STE '86-'88
Only. '89-current use J 37608.



Redundant radio controls are located on the steering wheel pad assembly. The J 35630 Test Adapter is used in conjunction with a DVOM such as J 34029-A or J 35500 to diagnose this system.

	J 36681 SELECTOR SHAFT NUT SOCKET L-Car
	J 544-01 STEERING WHEEL TENSION SCALE (0 - 4 lbs.)
	J 24292-B STEERING WHEEL PULLER Chevrolet Luv standard wheel
	J 36667 LOCK PLATE COMPRESSOR Adapter (LeMans) Used W/J 23653-C
	J 37608 STEERING WHEEL E & C CONTROL PINOUT BOX (1989-later vehicles equipped with bi-directional E & C serial data buss)

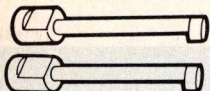
STEERING

STEERING COLUMN

J 23653-C

LOCK PLATE COMPRESSOR

J 23653-C was designed to compress the steering column lock plate allowing the retaining ring to be easily removed. It also incorporates a tapered retaining ring expander to eliminate the possibility of over-expanding the ring during installation. Included are adapters for Metric and English steering shaft threads. This tool will remove and install any GM standard or tilt column lock plate from 1969 through current.



J 36541

STEERING WHEEL PULLER
LEGS (LeMans)
Used with J 1859-A
(See page 25)

J 35628-A

VATS/PASS "INTERROGATOR" (includes J 35628-90 shown on pg. 27)

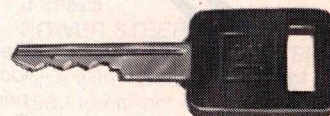
The Vehicle Anti Theft System (VATS), also referred to as the Personal Automotive Security System (PASS), is now standard on many GM models:

The J 35628-A Interrogator has four distinct and important diagnostic capabilities which include:

1. Key Duplication: Determine the electronic code of a key. If duplicate keys are needed, just insert a key in the Interrogator and the correct code is identified.
2. Lost Keys: If there are no keys for the car, J 35628-A's connectors hook up to the mating VATS/PASS connectors (located at the base of steering column under hush panel) to decode the car, telling you which number key blank (1-15) to use. (J 35628-A has a rotary switch on it with 15 positions.) The design of the VATS/PASS allows only one code to be entered at a time, with 4 minute intervals between each try. To assist the user, J 35628-A has a built in 4 minute timer.
3. Steering Column Fault Diagnosis: If the wire between the junction and the ignition is damaged, the car won't start even with the correct code. J 35628-A will test the condition of the wire.
4. Systems Diagnosis: A fault downstream of the column or in the VATS/PASS module can also be diagnosed with J 35628-A.



VATS/PASS Key

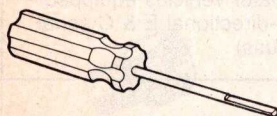


Standard GM Key



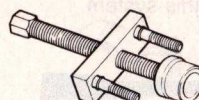
J 21854-01

PIVOT PIN REMOVER
(Tilt, tilt and telescopic)
All GM 1969 to Current



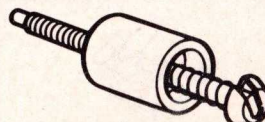
J 22635

LOCK SHOE AND RELEASE
LEVER PIN REMOVER AND
INSTALLER (Tilt and telescopic)
All GM 1969 to Current



J 23072



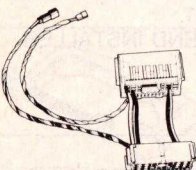
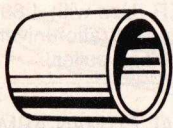
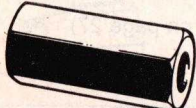
SHIFT TUBE REMOVER (Tilt
and telescopic) All GM 1969 to
Current



J 23073-01

SHIFT TUBE INSTALLER (Tilt
and telescopic) All GM 1969 to
Current

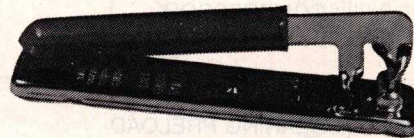
STEERING COLUMN (CONTINUED)

	J 23653-10 LOCK PLATE COMPRESSOR SCREW (Tilt & Telescopic) 1986 to Current E & K Car (Included with J 23653-C)
	J 29669-B KEY IDENTIFICATION TAB REMOVER All GM keys without plastic sleeves
	J 35628-90 VATS/PASS INTERROGATOR ADAPTER (1990 and later C Car)
	J 36544 STEERING SHAFT BEARING RACE INSTALLER (LeMans)
	J 38256 PIVOT PIN REMOVER (Geo Prizm tilt only; use with J 6125-1B)

	J 38364 TILT STEERING COLUMN SPRING COMP. (Geo Prizm)
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J 36472 DESK TOP KEY TAB REMOVER

Quickly punches out the code number slug on all 1970 and newer GM auto and truck keys. This tool has been updated to work on GM keys with plastic sleeves. Handle is heat-treated spring steel. Base is reinforced formed steel with rubber pads to prevent marring bench top or desk. Long handle assures good leverage.



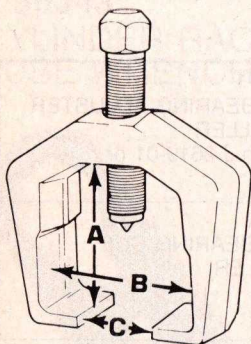
POWER STEERING GEAR—605 MODEL





J 29107 PITMAN ARM PULLER

For use on the 605 Model Power Steering Gear, J 29107 also has application on the 800-808 and the 535 Gear.

APPROX. DIMENSIONS

- A 2³/₈"
- B 2¹/₂"
- C 1¹/₄"




	J 6133-01 PITMAN SHAFT SEAL INSTALLER
	J 6217 VALVE CONNECTOR SEAT INSTALLER
	J 7754-01 TORQUE WRENCH (0-25 inch lbs., 0-5 N-M ³ / ₈ " drive) (Use to adjust "over center" preload)
	J 8810 PITMAN SHAFT BEARING REMOVER & INSTALLER

	J 4245 INTERNAL SNAP RING PLIERS Straight .070" dia. tip
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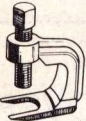





POWER STEERING GEAR 800—808 MODEL

	J 6219 PITMAN SHAFT OIL SEAL INSTALLER
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	J 6222-A ADJUSTER PLUG SEAL PROTECTOR
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STEERING

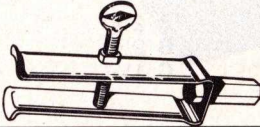
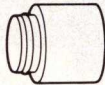
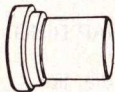
POWER STEERING GEAR 800—808 MODEL (CONTINUED)

	J 6278 PITMAN SHAFT BEARING REMOVER AND INSTALLER
	J 6627-A TIE ROD PULLER
	J 7079-2 NON-THREADED UNIVERSAL DRIVER HANDLE
	J 7576 RACK PISTON TEFLON RING COMPRESSOR (Compressed size - 3.127")
	J 7624 BEARING PRELOAD SPANNER WRENCH
	J 8092 THREADED UNIVERSAL DRIVER HANDLE (3/4" - 10" thread)
	J 8524-1 ADJUSTER PLUG BEARING INSTALLER (Use with J 7079-2) light duty truck through 1982

	J 8947 RACK PISTON TEFLON RING COMPRESSOR (Compressed size 2.752")
	J 21552 RACK PISTON ARBOR
	J 22269-01 TIE ROD END INSTALLER
	J 22407 PITMAN SHAFT BEARING INSTALLER (Use with J 8092)/ All with variable ratio universal steering linkage puller
	J 29107 UNIVERSAL PITMAN ARM PULLER (featured on page 27)
	J 29810 STUB SHAFT SEAL PROTECTOR All 3/4" shaft

STEERING GEAR—535 MODEL S & T TRUCK & M VAN

	J 6219 PITMAN SHAFT SEAL INSTALLER
	J 6278 PITMAN SHAFT BEARING REMOVER
	J 8092 THREADED UNIVERSAL DRIVER HANDLE (3/4"-10 thread)
	J 29107 PITMAN ARM PULLER (featured on page 27.)

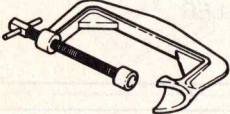
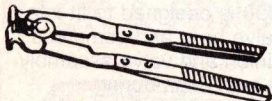


	J 29369-1 WORM BEARING ADJUSTER CUP PULLER (Use with J 2619-01 or J 23907)
	J 35365 WORM BEARING CUP INSTALLER
	J 35469 PITMAN SHAFT BEARING INSTALLER

RACK & PINION A, C, H & X CARS

J 6627-A TIE ROD PULLER

This puller has a one piece steel cast body and a forcing screw with a hardened steel end. J 6627-A easily slips into place and quickly removes all standard General Motors tie rods.



	J 22269-01 TIE ROD END INSTALLER
	J 22610 SERVICE BOOT CLAMP INSTALLER
	J 28478-A OUTER RACK SEAL PROTECTOR
	J 28527 PINION SEAL INSTALLER

	J 29810 STUB SHAFT SEAL PROTECTOR
	J 29860 RACK PISTON SEAL PROTECTOR 1982 to Current
	J 37090 PINION AND VALVE ASSEMBLY TEFLON RING PROTECTOR (Featured on following page)
	J 34028 INNER TIE ROD WRENCH (Featured on page 32)
	J 34987 INNER RACK SEAL REMOVER (Featured on page 33)
	J 37209 STUB SHAFT SEAL INSTALLER

RACK & PINION J, L & N—CAR, LEMANS

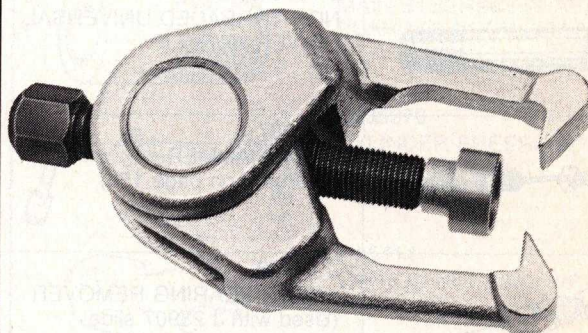
J 36343 CYLINDER RACK TUBE WRENCH



The newly designed center take-off rack and pinion steering will feature a two piece rack which is connected together with a 42.8mm nut. J 36343 is used to loosen and tighten the nut to the proper torque without rounding the corners off the nut. The tool is double ended for use on Pontiac Lemans which has a 40mm nut.


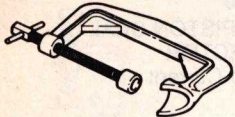
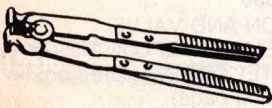

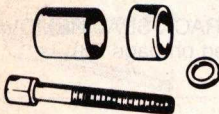
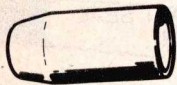
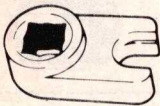
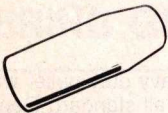
J 24319-01 UNIVERSAL STEERING LINKAGE PULLER

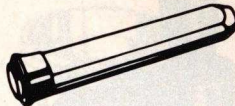
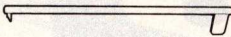

This heavy duty puller will remove all standard General Motors steering linkage. The center screw has a cupped swivel end which reduces required torque and keeps the tool centered during operation.



STEERING

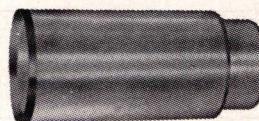
RACK & PINION J, L & N—CAR, LEMANS (CONTINUED)

	J 6627-A TIE ROD PULLER
	J 22269-01 TIE ROD END INSTALLER
	J 22610 SERVICE BOOT CLAMP INSTALLER
	J 28527 PINION SEAL INSTALLER (Without handling package)
	J 29809 TIE ROD PIVOT BUSHING REMOVER AND INSTALLER
	J 29810 STUB SHAFT SEAL PROTECTOR
	J 29811 RACK ASSEMBLY WRENCH
	J 29812 PISTON ROD SEAL PROTECTOR

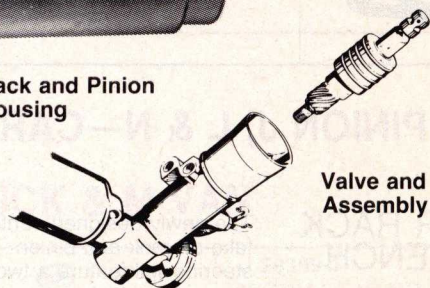
	J 29822-A PINION SEAL INSTALLER (Handling package only)
	J 36666 STEERING CENTERING POSITION GAUGE (LeMans Only)
	J 37209 STUB SHAFT SEAL INSTALLER

J 37090 PINION AND VALVE ASSEMBLY TEFLON RING PROTECTOR

J 37090 is designed to fit into the valve bore and compress the pinion and valve assembly teflon seal rings during installation of this assembly. J 37090 is made of clear material allowing the seals to be viewed during installation. This tool can be used on any General Motors Power Rack and Pinion.



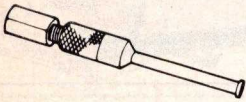
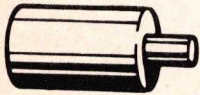


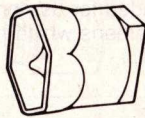
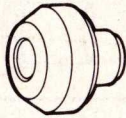
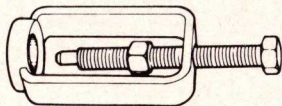
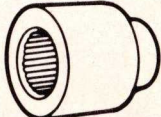
Rack and Pinion
Housing




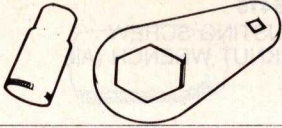
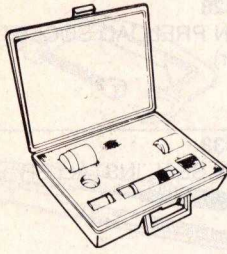
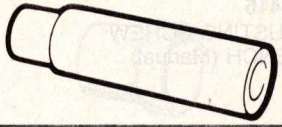
Valve and Pinion
Assembly

RACK & PINION M CAR (SPRINT/FIREFLY/GEO METRO)

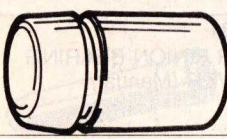

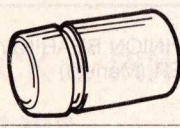
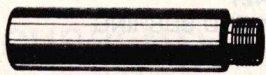
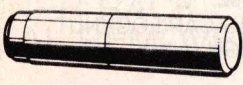
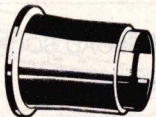
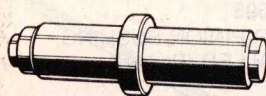
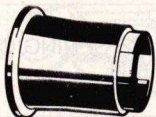
	J 7079-2 NON-THREADED UNIVERSAL DRIVER HANDLE
	J 23907 SLIDE HAMMER (Featured on page 156)
	J 34839 PINION BEARING REMOVER (Used with J 23907 slide hammer)
	J 34840 PINION BEARING INSTALLER (Used with J 7079-2 driver handle)

	J 34859 PINION BEARING PLUG SOCKET (43mm)
	J 34868 RACK BUSHING INSTALLER
	J 34869 RACK BUSHING REMOVER (Use with J 23907)
	J 34871-A PINION SOCKET


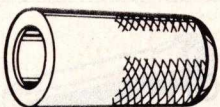
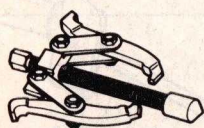
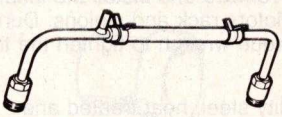

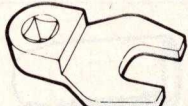
RACK & PINION R CAR (SPECTRUM/SUNBURST)

	J 7079-2 NON-THREADED UNIVERSAL DRIVER HANDLE		J 35309 ADJUSTING PLUG AND LOCKNUT WRENCH
	J 33997-100 POWER STEERING REPAIR KIT (Includes J 33997-2 seal ring installer A, —3 seal ring installer B, —4 oil seal remover and installer, —5 stub shaft seal ring compressor, —6 piston seal ring compressor, —7 stub shaft oil seal installer, —8 sleeve seal ring compressor, —15 storage case)		J 35527 RACK SHAFT SEAL REMOVER

RACK & PINION (GEO STORM)

	J 33997-2 RACK SEAL RING EXPANDER		J 38304-5 INNER RACK OIL SEAL REMOVER
	J 33997-3 RACK SEAL RING INSTALLER		J 38304-6 INNER RACK SEAL INSTALLER
	J 38304-1 LOWER PINION VALVE BEARING & OIL SEAL REMOVER		J 38304-7 RACK PISTON SEAL COMPRESSOR
	J 38304-4 BALL BEARING & OIL SEAL INSTALLER		J 38304-8 PINION SEAL RING COMPRESSOR

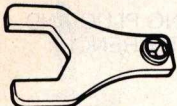
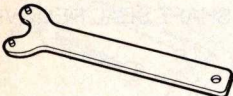
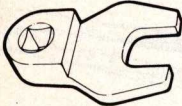
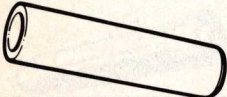
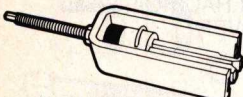

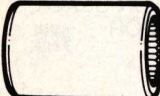
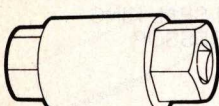
RACK & PINION (NOVA/GEO TRACKER/GEO PRIZM)

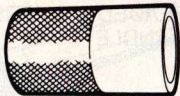
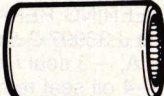
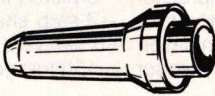
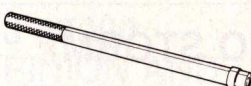

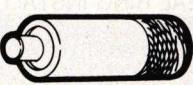
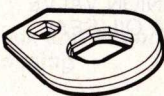
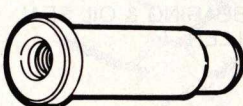
	*J 8092 DRIVER HANDLE (All)		*J 33411 MAIN STEERING SHAFT BEARING INSTALLER (All)
	*J 22888-20 UPPER PINION BEARING REMOVER (Manual)		*J 35376 CYLINDER PRESSURE TESTER (Power)
	*J 24319-01 TIE ROD PULLER (All)		J 35414 TIE ROD HOUSING WRENCH (All)

*NOVA ONLY

STEERING

RACK & PINION (NOVA/GEO TRACKER/GEO PRIZM) (CONTINUED)

	*J 35415 ADJUSTING SCREW LOCKNUT WRENCH (All)
	J 35416 ADJUSTING SCREW WRENCH (Manual)
	J 35418 STEERING RACK END WRENCH (All)
	*J 35419 UPPER PINION BEARING INSTALLER (Manual)
	*J 35420 STEERING GEAR BUSHING INSTALLER (All)
	*J 35421 RACK END BUSHING INSTALLER (Manual)
	*J 35422 PINION PRELOAD SOCKET (Manual)
	*J 35423 RACK GUIDE SPRING CAP WRENCH (All)

	J 35425 MANUAL RACK SEAL INSTALLER/POWER RACK PINION BEARING AND SEAL INSTALLER (All)
	*J 35428 PINION PRELOAD SOCKET (Power)
	*J 35433 PINION SEAL INSTALLER (Manual)
	*J 35434 RACK CYLINDER SEAL REMOVER (Power)
	*J 35681 LOWER PINION BEARING REMOVER (Manual)
	*J 35682 LOWER PINION BEARING INSTALLER (Manual)
	*J 35692 SPRING CAP LOCKNUT WRENCH (All)
	*J 35695 INNER PINION BUSHING INSTALLER (Power)

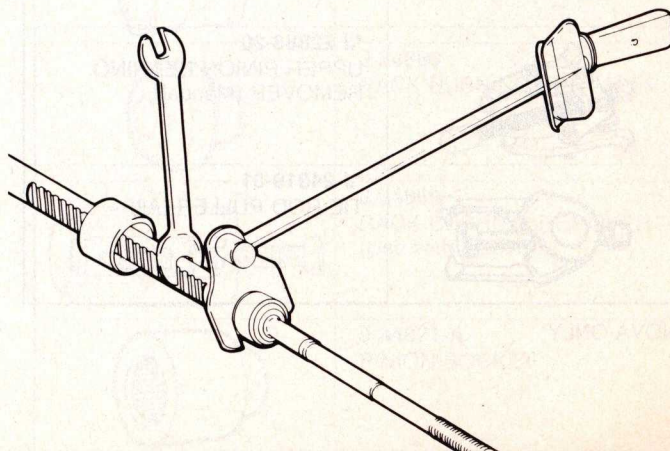
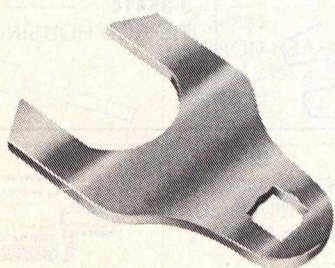
* NOVA ONLY

RACK & PINION CHEVETTE & T-1000


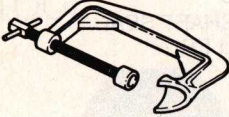
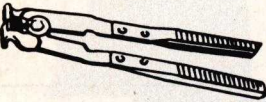
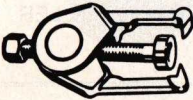

J 34028 INNER TIE ROD WRENCH

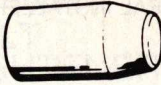

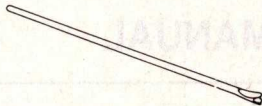

J 34028 was specifically designed to remove and install the inner tie rods on all end take-off General Motors rack and pinions. During installation, this tool is used with a torque wrench to tighten the tie rod end to the specified torque.

J 34028 is manufactured of high quality steel, heat treated and brightly plated.



RACK & PINION CHEVETTE & T-1000 (CONTINUED)

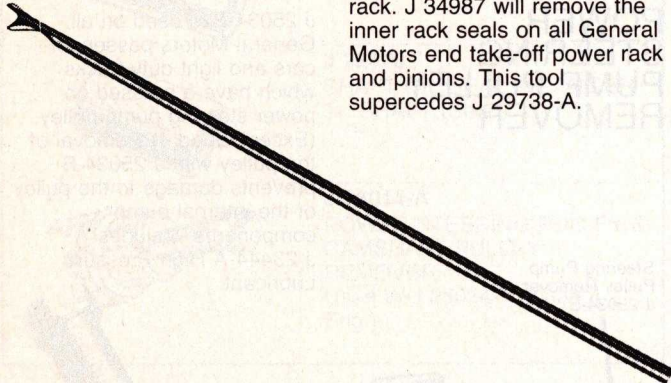
	J 6627-A TIE ROD PULLER (Featured on page 29)
	J 22269-01 TIE ROD END INSTALLER
	J 22610 SERVICE BOOT CLAMP INSTALLER
	J 24319-01 UNIVERSAL STEERING LINKAGE PULLER (Featured on page 28)
	J 28527 PINION SEAL INSTALLER

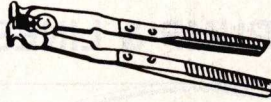





	J 29707 INNER AND OUTER RACK SEAL INSTALLER
	J 29708-A RACK PISTON TEFLON SEAL PROTECTOR
	J 34987 INNER RACK SEAL REMOVER (Featured on this page)
	J 37090 PINION AND VALVE ASSEMBLY TEFLON RING PROTECTOR (Featured on page 28)


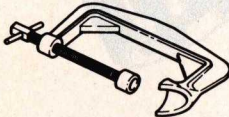
RACK & PINION CORVETTE (1984 TO CURRENT)

J 34987 INNER RACK SEAL REMOVER

This new improved design is used with a hammer to flip the seal 90° in the rack bore and slide it down and out of the rack. J 34987 will remove the inner rack seals on all General Motors end take-off power rack and pinions. This tool supercedes J 29738-A.

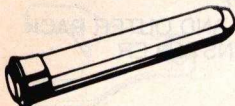



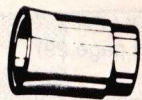

	J 22610 SERVICE BOOT CLAMP INSTALLER
	J 24319-01 UNIVERSAL STEERING LINKAGE PULLER (Featured on page 29)
	J 28478-A OUTER RACK SEAL PROTECTOR
	J 28527 PINION SEAL INSTALLER
	J 29708-A RACK PISTON TEFLON SEAL PROTECTOR
	J 29810 STUB SHAFT SEAL PROTECTOR

	J 6627-A TIE ROD PULLER (Featured on page 29)
	J 22269-01 TIE ROD END INSTALLER

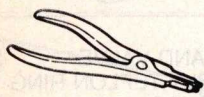
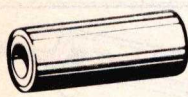
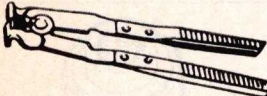
STEERING

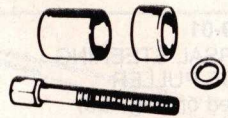


RACK & PINION CORVETTE (1984 TO CURRENT) (CONTINUED)

	J 29822-A PINION SEAL INSTALLER
	J 34028 INNER TIE ROD WRENCH (Featured on page 32)

	J 37090 PINION AND VALVE ASSEMBLY TEFLON RING PROTECTOR (Featured on page 30)
	J 37209 STUB SHAFT SEAL INSTALLER

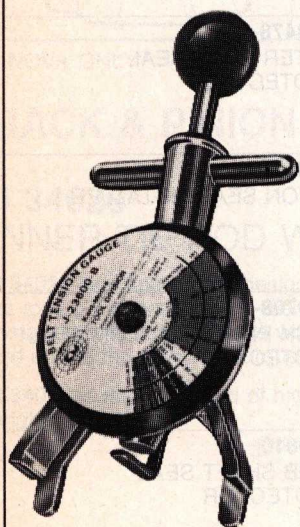
RACK & PINION — MANUAL

	J 4245 INTERNAL SNAP RING PLIERS (Straight .070" Dia. tip)
	J 7728 SHAFT OIL SEAL INSTALLER 3/4" SHAFT (Long)
	J 22610 SERVICE BOOT SEAL INSTALLER

	J 29809 TIE ROD PIVOT BUSHING REMOVER & INSTALLER (J-Car)
	J 29823 INTERNAL RETAINING RING REMOVER (J-Car)
	J 34028 INNER TIE ROD WRENCH All but J, L & N Car. (Featured on page 32)

POWER STEERING PUMP & LINES

J 23600-B BELT TENSION GAUGE

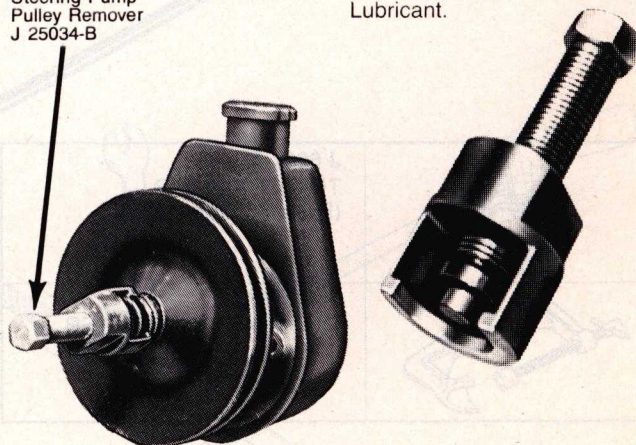


J 23600-B is used to adjust accessory drive belt tension on all standard automotive applications. Correct tension increases belt and bearing life and improves accessory efficiency. The face of this gauge is color coded to give the operator a guide for proper tension. The dial range is 30 to 180 pounds.

J 25034-B POWER STEERING PUMP PULLEY REMOVER

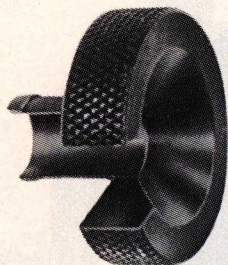
J 25034-B is used on all General Motors passenger cars and light duty trucks which have a pressed on power steering pump pulley. (Except Quad 4) Removal of the pulley with J 25034-B prevents damage to the pulley or the internal pump components. Includes J 23444-A High Pressure Lubricant.

Steering Pump
Pulley Remover
J 25034-B



POWER STEERING PUMP & LINES (CONTINUED)

J 36391 QUICK CONNECT SEPARATOR TOOL

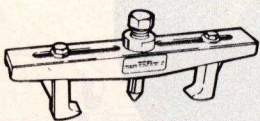

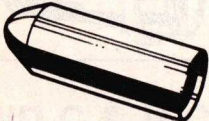
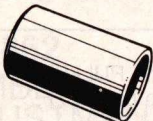
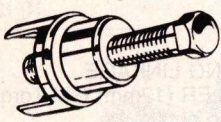


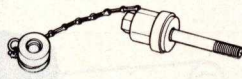

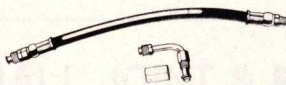
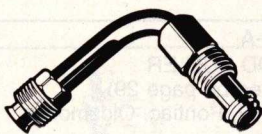
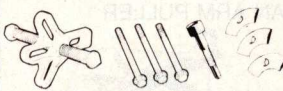
J 36391 slides down the power steering line into the quick connector spreading the plastic clip apart for easy removing of the power steering line without disturbance to the quick connect seals. For 1987 and later E, K, V vehicles.

J 36851 BELT TIGHTENER

Tightens power steering belt on most GM-type Saginaw pumps. Prevents damaging the power steering pump housing. Rugged, two legged for stability, heat-treated steel with 1/2" square drive.



	J 8433 CAST PULLEY REMOVER Chevrolet 1967-1974
	J 21239 STAMPED PULLEY REMOVER Chevrolet 1967-1974
	J 22616 SHAFT SEAL PROTECTOR All GM
	J 22670 SHAFT OIL SEAL INSTALLER 3/4" SHAFT (Short)
	J 36014-A POWER STEERING PULLEY & CAMSHAFT PULLEY REMOVER Used W/J 25034-1 (Quad 4 Eng.)

	J 36015 POWER STEERING PULLEY & CAMSHAFT PULLEY INSTALLER (All GM including Quad 4 Eng.)
	J 37609 POWER STEERING PUMP PULLEY REMOVER FORCING SCREW (U-Van; used with J 25034-B)
	J 38049 POWER STEERING PRESSURE TEST ADAPT. KIT (W-Car)
	J 38049-25 POWER STEERING PRESSURE TEST ADAPT. (1990 Chev. W-Car with 2.5L engine; use with J 38049 & J 5176-D)
	J 38343 POWER STEERING DRIVE PULLEY REMOVER (1989 1/2 H/O Quad 4 & early 1990 Quad 4)

STEERING

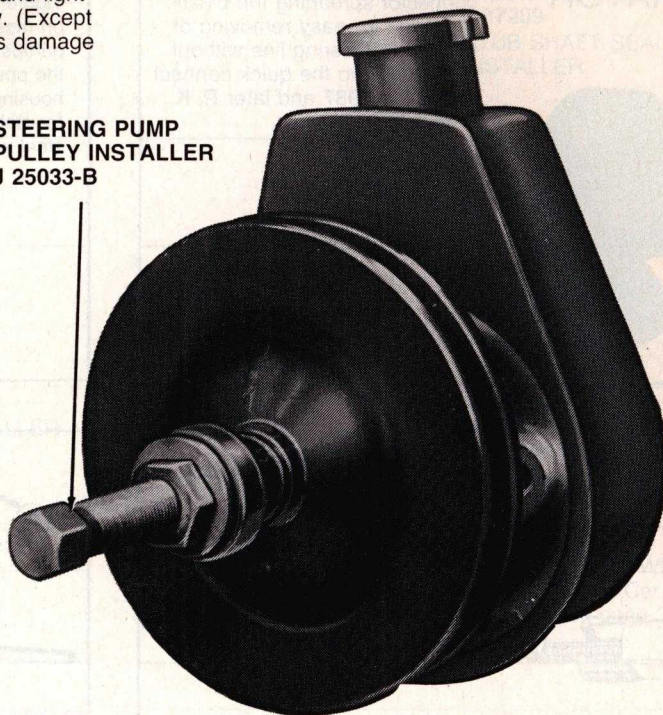
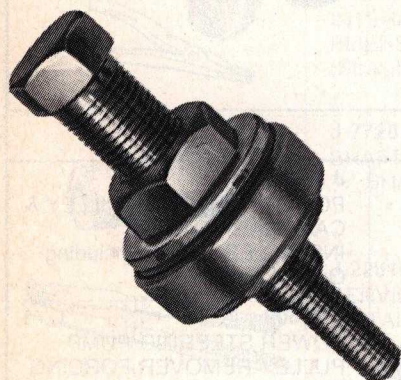
POWER STEERING PUMP & LINES (CONTINUED)

J 25033-B


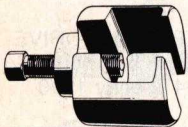

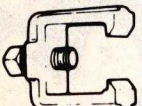
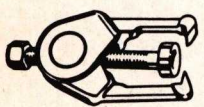
POWER STEERING PUMP PULLEY INSTALLER




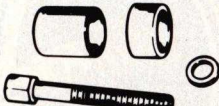
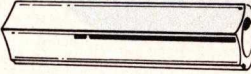
J 25033-B is used on all General Motors passenger cars and light duty trucks with a pressed on power steering pump pulley. (Except Quad 4.) Installation of the pulley with J 25033-B prevents damage to the pulley and the internal pump components. Includes J 23444-A High Pressure Lubricant.

STEERING PUMP
PULLEY INSTALLER
J 25033-B



STEERING LINKAGE

	J 6627-A TIE ROD PULLER (Featured on page 29) Chevrolet, Pontiac, Oldsmobile & Buick
	J 6632-01 PITMAN ARM PULLER
	J 9172 PITMAN ARM PULLER
	J 21687-02 TIE ROD END REMOVER (M-Car, Metro, Tracker, Storm, Prizm)
	J 24319-01 UNIVERSAL STEERING LINKAGE PULLER (Featured on page 29)



	J 29107 PITMAN ARM PULLER (Featured on page 27)
	J 29193 STEERING LINKAGE INSTALLER (12mm) GM Torque prevailing nuts
	J 29194 STEERING LINKAGE INSTALLER (14mm) GM Torque prevailing nuts
	J 29809 TIE ROD PIVOT BUSHING REMOVER AND INSTALLER (J, L & N Car)
	J 37686 R/V TRUCK STEERING LINKAGE INSTALLER

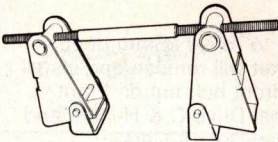
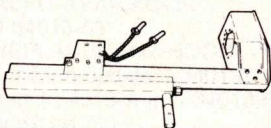
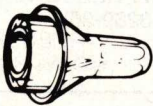
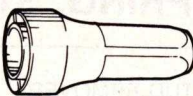
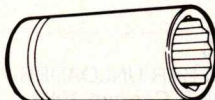

FWD A & X CARS (SPRING, STRUT, BALL JOINT & HUB)

J 28733-A FRONT HUB SPINDLE REMOVER



This tool enables the technician to remove the front hub from the axle shaft on all GM front wheel drive cars except Geo models without removing any components from the front suspension. Also for use on 4x4 T-Truck.

	J 6627-A WHEEL STUD REMOVER
	J 28671 FRONT INNER HUB SEAL INSTALLER/1980-1983




	J 33432-A REAR MONO-LEAF SPRING COMPRESSOR (All Wheel Drive STE)
	J 34013-B STRUT COMPRESSOR (Use with J 3289-20)
	J 34657-A FRONT KNUCKLE SEAL INSTALLER/1984-Current heavy duty A-Car
	J 34658 FRONT KNUCKLE SEAL INSTALLER 1984-Current
	J 34826 36mm HUB NUT WRENCH (1986 to Current C & H-Cars & heavy duty A-Cars)
	J 37619 REAR BALL JOINT REMOVER (All Wheel Drive STE)

FWD C & H CARS (SPRING, STRUT, BALL JOINT & HUB)

J 29862 CAMBER ADJUSTMENT TOOL



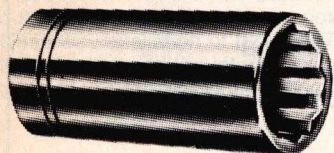
This tool allows the technician to precisely control the movement of the lower strut mount while performing camber adjustment on Front Wheel Drive C & H-Cars.

	J 6627-A WHEEL STUD REMOVER
	J 23028-01 REAR COIL SPRING REMOVER & INSTALLER Use with transmission jack
	J 28733-A FRONT HUB SPINDLE REMOVER (Featured above)

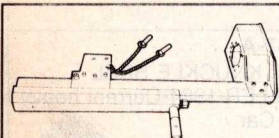
SUSPENSION

FWD C & H CARS (SPRING, STRUT, BALL JOINT & HUB) (CONTINUED)

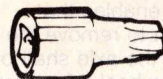
J 34826 36MM HUB NUT WRENCH



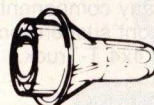
The 1/2" drive 36mm deep socket will remove and install the front hub nut on Front Wheel Drive C & H-Cars and Heavy-Duty A-Cars.



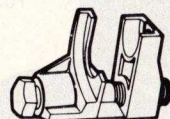
J 34013-B
STRUT COMPRESSOR
(Use with J 3289-20)



J 34161
HUB BOLT WRENCH #55
TORX

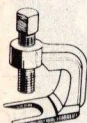


J 34657-A
FRONT KNUCKLE SEAL
INSTALLER

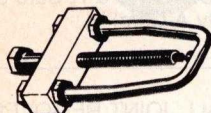


J 36226
BALL JOINT SEPARATOR

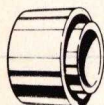
FWD E & E/K CARS (SPRING, STRUT, BALL JOINT & HUB)



J 6627-A
WHEEL STUD REMOVER



J 22517-C
TORSION BAR UNLOADER
1966-1985 E-Car and 1983-
current 4x4 S-Truck.



J 28574
FRONT KNUCKLE INNER
SEAL INSTALLER
1979-1985



J 28733-A
FRONT HUB SPINDLE
REMOVER 1979-1985
(Featured on pg 37)



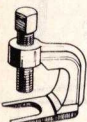
J 35551
BALL STUD NUT WRENCH
(1986 to Current E/K-Cars)

J 35315 BALL STUD REMOVER

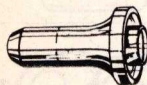


This tool is used to separate the ball stud from the knuckle without damage to the drive axle or ball joint. Once J 35315 is installed on the knuckle, the forcing screw is simply tightened forcing the stud out of the knuckle. J 35315 is a high quality steel casting.

FWD J, L & N CARS (SPRING, STRUT, BALL JOINT & HUB)



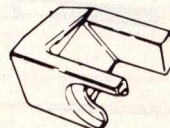
J 6627-A
WHEEL STUD REMOVER



J 22388
INNER HUB SEAL INSTALLER



J 28733-A
FRONT HUB SPINDLE
REMOVER
(Featured on pg 37)

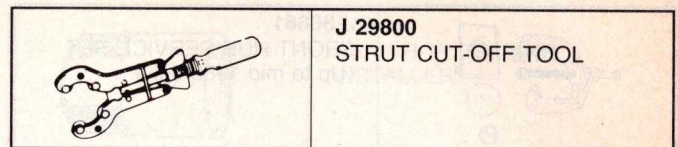


J 29330
BALL JOINT SEPARATOR

FWD J, L & N CARS (SPRING, STRUT, BALL JOINT & HUB) (CONTINUED)



J 29778-A
STRUT CARTRIDGE
WRENCH



J 29800
STRUT CUT-OFF TOOL

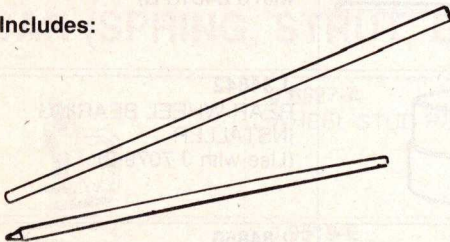
J 34013-B STRUT SPRING COMPRESSOR

The struts on 1984 and newer General Motors vehicles incorporate a number of design changes including a deflector and large diameter springs. The design of the new struts lead to the development of the J 34013-B Strut Spring Compressor.

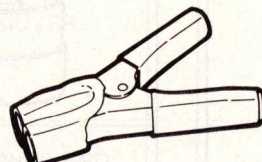
J 34013-B was designed to incorporate the innovative features of the previously released Strut Compressor in addition to the following:

- Conveniently mounts in the J 3289-20 Holding Fixture Base (not included).
- Compresses all GM Struts.
- Heavy Duty design.
- Designed for use with an air ratchet. Complete operating instructions included.

Includes:



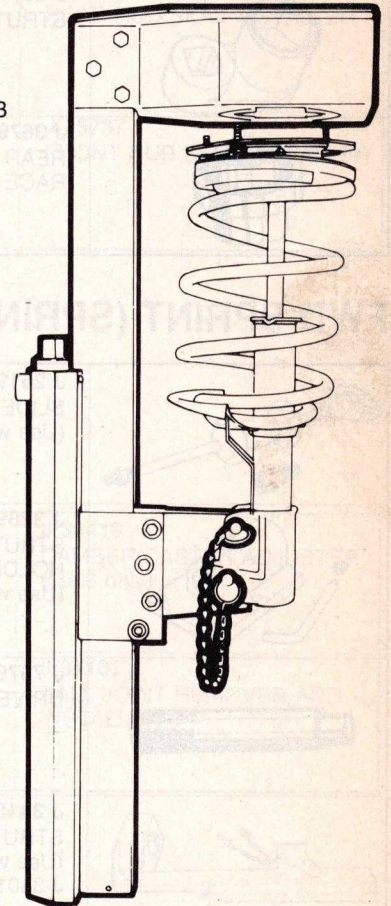
Alignment Rods
J 34013-27
J 34013-38
J 34013-86
J 34013-96
J 34013-900



J 34013-20
Damper Rod Clamp

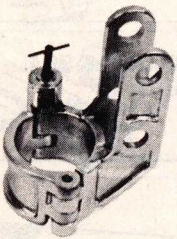
ALSO AVAILABLE:
J 34013-53
REPLACEMENT HOOD
(Used to update J 34013
and J 34013-A to J 34013-B
applications)

J 34013-88
STRUT
COMPRESSOR
ADAPTER (W-Car,
Pontiac Lemans,
Geo-Models)

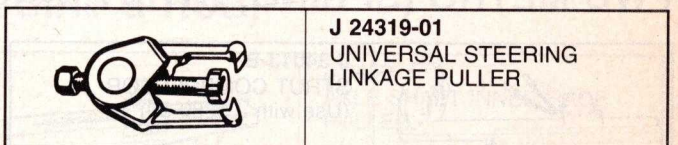


FWD LEMANS (SPRING, STRUT, BALL JOINT & HUB)

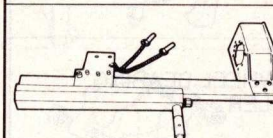
J 34013-88 STRUT COMPRESSOR ADAPTER



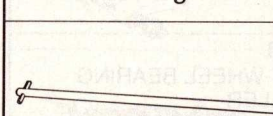
Securely mounts the strut in the compressing fixture for assembly and disassembly. This easy-to-use adapter mounts with quick release pins and has a spring pin locking feature. This adapter works on both W-Car and Pontiac Lemans struts.



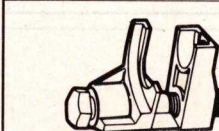
J 24319-01
UNIVERSAL STEERING
LINKAGE PULLER



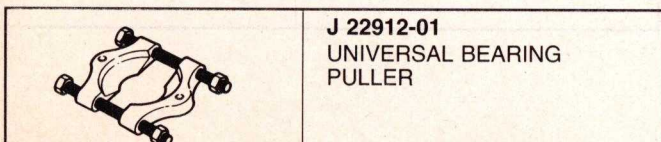
J 34013-B
MCPHERSON STRUT SPRING
COMPRESSOR



J 34013-86
STRUT ALIGNMENT ROD



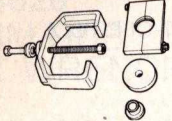
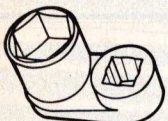

J 36226
BALL STUD REMOVER

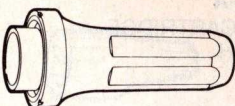
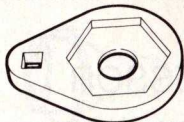
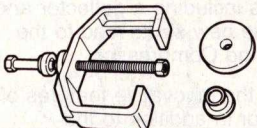


J 22912-01
UNIVERSAL BEARING
PULLER

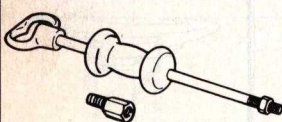
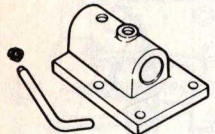
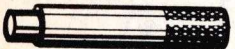
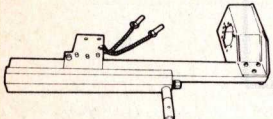
SUSPENSION



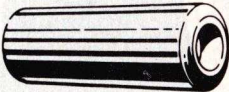

FWD LEMANS (SPRING, STRUT, BALL JOINT & HUB) (CONTINUED)

	J 36661 FRONT HUB SERVICE SET (Up to mid 1988 only)
	J 36710 STRUT NUT WRENCH
	J 36791 REAR HUB BEARING OUTER RACE INSTALLER

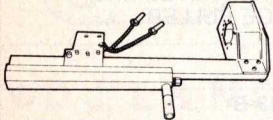

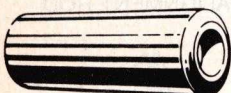
	J 36797 REAR HUB SEAL INSTALLER
	J 36804-A STRUT TUBE NUT WRENCH (1988-Current)
	J 37105 FRONT HUB SERVICE SET (Mid 1988 and later)


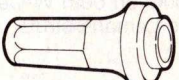
FWD SPRINT (SPRING, STRUT, BALL JOINT & HUB)

	J 2619-01 SLIDE HAMMER (Use with J 34866)
	J 3289-20 STRUT COMPRESSOR HOLDING FIXTURE (Use with J 34013-B)
	J 7079-2 DRIVER HANDLE
	J 34103-B STRUT COMPRESSOR (Use with J 3289-20 and J 34013-96)

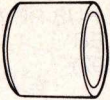

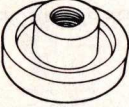
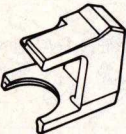
	J 34013-96 STRUT ALIGNMENT ROD (Use with J 34013-B)
	J 34842 REAR WHEEL BEARING INSTALLER (Use with J 7079-2)
	J 34856 WHEEL BEARING AND HUB INSTALLER (Use with J 7079-2)
	J 34866 FRONT WHEEL HUB REMOVER (Use with J 2619-01)

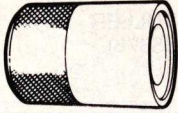
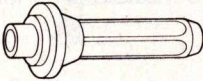
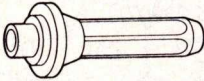
FWD METRO (SPRING, STRUT, BALL JOINT & HUB)

	J 34013-B STRUT COMPRESSOR (Use with J 3289-20)
	J 34842 REAR WHEEL BEARING INSTALLER
	J 34856 FRONT WHEEL BEARING INSTALLER



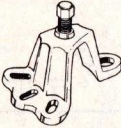
	J 34866 FRONT HUB AND REAR BRAKE DRUM REMOVER
	J 34881 FRONT KNUCKLE SEAL INSTALLER

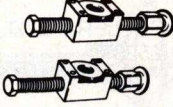
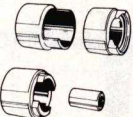
FWD NOVA (SPRING, STRUT, BALL JOINT & HUB)

	J 35379 FRONT KNUCKLE SUPPORT
	J 35399 FRONT AXLE HUB INSTALLER
	J 35411 FRONT HUB BEARING INSTALLER
	J 35413 BALL JOINT SEPARATOR




	J 35440 REAR HUB BEARING INSTALLER
	J 35736 REAR HUB SEAL INSTALLER
	J 35737 FRONT HUB SEAL INSTALLER

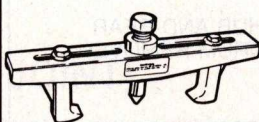
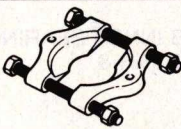

P CAR (SPRING, STRUT, BALL JOINT & HUB)

	J 6627-A WHEEL STUD REMOVER
	J 9519-E BALL JOINT REMOVER AND INSTALLER
	J 28733-A FRONT HUB SPINDLE REMOVER (Featured on page 37)

	J 36419 CAMBER/CASTER ADJUSTER (1988 only)
	J 37161 BALL JOINT REMOVER AND INSTALLER

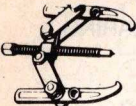
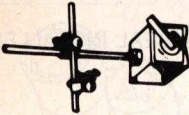

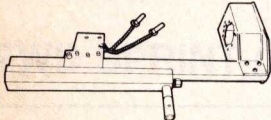
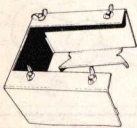

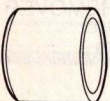
FWD PRIZM (SPRING, STRUT, BALL JOINT & HUB)


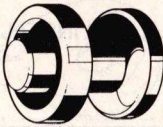

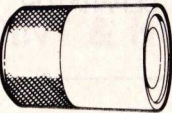

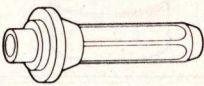
	J 6627-A TIE ROD AND WHEEL STUD PULLER
	J 8001 DIAL INDICATOR SET
	J 8092 DRIVER HANDLE

	J 8433 AXLE SHAFT INNER RACE PULLER
	J 22912-01 AXLE HUB INNER RACE REMOVER
	J 23907 SLIDE HAMMER

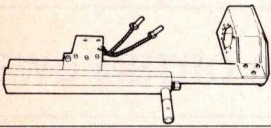


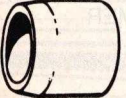
SUSPENSION

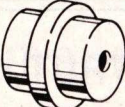
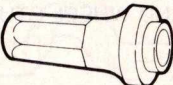
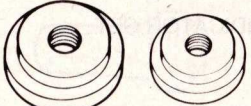
FWD PRIZM (SPRING, STRUT, BALL JOINT & HUB) (CONTINUED)

	J 25287 AXLE HUB PULLER (Use with J 35378)
	J 26900-13 MAGNETIC INDICATOR BASE
	J 26941 KNUCKLE SEAL REMOVER (Use with J 23907)
	J 34013-B STRUT COMPRESSOR (Use with J 34013-97)
	J 34013-97 STRUT COMPRESSOR ADAPTER (Use with J 34013-B)
	J 35378 AXLE HUB PULLER PILOT (Use with J 25287)
	J 35379 FRONT KNUCKLE SUPPORT

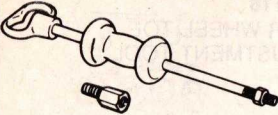
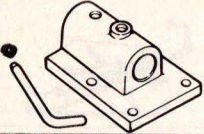


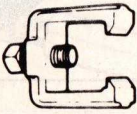
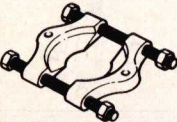
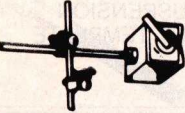
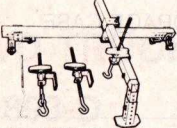
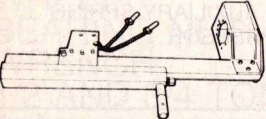
	J 35399 FRONT AXLE HUB REMOVER AND INSTALLER (Use with J 8092)
	J 35400 BEARING INNER RACE INSTALLER
	J 35413 BALL JOINT SEPARATOR
	J 35440 BEARING OUTER RACE INSTALLER
	J 37777 FRONT HUB BEARING RACE INSTALLER
	J 35737 FRONT HUB SEAL INSTALLER

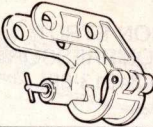
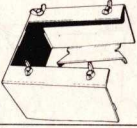
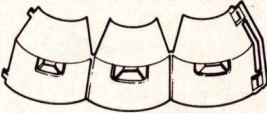

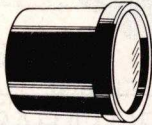
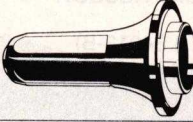
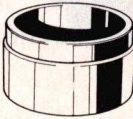
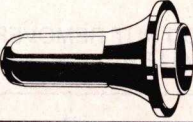
FWD R CAR (SPRING, STRUT, BALL JOINT & HUB)

	J 34013-B STRUT COMPRESSOR (Use with J 3289-20)
	J 34866 FRONT HUB AND REAR BRAKE DRUM REMOVER
	J 35301 FRONT HUB INNER BEARING RACE REMOVER & INSTALLER
	J 35302 FRONT HUB BEARING SUPPORT

	J 35303 FRONT HUB OIL SEAL INSTALLER
	J 35305-A REAR HUB OIL SEAL INSTALLER
	J 35307 REAR HUB INNER & OUTER BEARING INSTALLER

FWD STORM (SPRING, STRUT, BALL JOINT & HUB)

	J 2619-01 SLIDE HAMMER
	J 3289-20 HOLDING FIXTURE BENCH MOUNT
	J 6627-A STUD REMOVER
	J 8001 DIAL INDICATOR SET
	J 21687-02 TIE ROD REMOVER
	J 22912-01 OUTER RACE REMOVER
	J 26900-13 MAGNETIC BASE
	J 28467-A ENGINE SUPPORT FIXTURE
	J 34013-B STRUT SPRING COMPRESSOR — (Featured on page 39) (Use with J 3289-20)


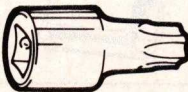
	J 34013-88 LOWER STRUT SPRING COMPRESSOR ADAPTER (Use with J 34013-B)
	J 34013-110 UPPER STRUT SPRING COMPRESSOR ADAPTER (Use with J 34013-B)
	J 34754 INNER DRIVE JOINT SEAL PROTECTOR
	J 34866 WHEEL HUB REMOVER
	J 38284 BEARING REMOVER AND INSTALLER
	J 38285 INNER SEAL INSTALLER
	J 38286 KNUCKLE SUPPORT
	J 38287 OUTER SEAL INSTALLER

FWD W CAR (SPRING, STRUT, BALL JOINT)

J 35917 TIE ROD/BALL JOINT REMOVER

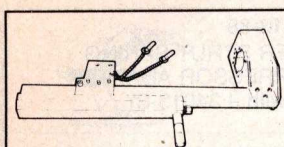
J 35917 is required to separate the ball joint from the front lower control arm and is also used to pull the tie rods on the W-Car. The tool securely engages each component when performing these procedures.



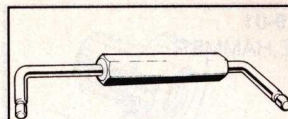
	J 28733-A FRONT HUB SPINDLE REMOVER (Featured on page 37)
	J 29843-10 TORX BIT (T-50)

SUSPENSION

FWD W CAR (SPRING, STRUT, BALL JOINT) (CONTINUED)



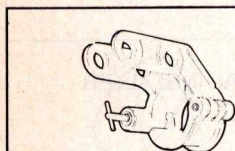
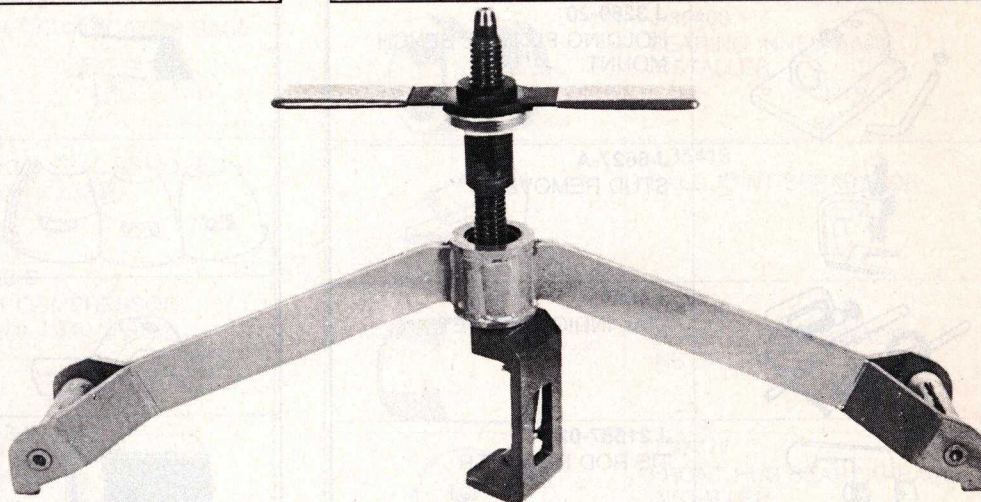
J 34013-B
MCPHERSON STRUT
SPRING COMPRESSOR
(Use with J 34013-88)



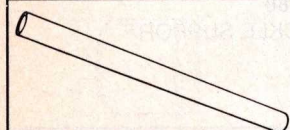
J 38118
REAR WHEEL TOE
ADJUSTMENT TOOL

J 35778 REAR LEAF SPRING COMPRESSOR

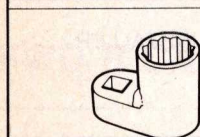
The W-Car is equipped with a composite fiberglass mono-leaf spring which can be removed and installed with J 35778. This tool will compress or flatten the spring for spring replacement or other rear suspension service. J 35778 is of heavy duty construction with general instructions included.



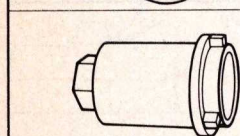
J 34013-88
STRUT COMPRESSOR
ADAPTER
(Used with J 34013-B)
(Featured on page 39)
(Off car)



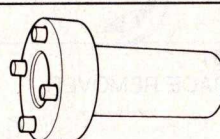
J 35668
STRUT EXTENSION ROD
(On car)



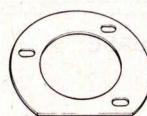
J 35669
STRUT ROD NUT REMOVER
AND INSTALLER
(On car)



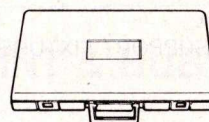
J 35670
JOUNCE BUMPER RETAINER
SPANNER WRENCH
(On car)



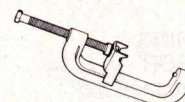
J 35671
STRUT CAP NUT WRENCH
(On car)



J 36892-A
FRONT SUSPENSION
ALIGNMENT TEMPLATE



J 36893
TOOL STORAGE CASE
(W Car only)

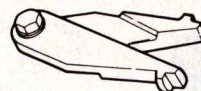
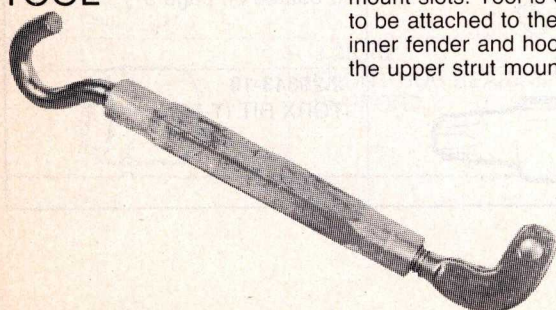


J 35796
REAR AUXILIARY SPRING
COMPRESSOR

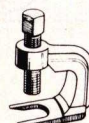
RWD ALL MODELS

J 29724 CAMBER ADJUSTING TOOL

For 1982 to current F-Car. Camber is adjusted by moving the front strut at the upper mount slots. Tool is designed to be attached to the front inner fender and hooked on the upper strut mount.

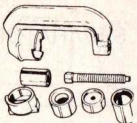


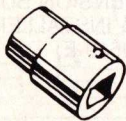
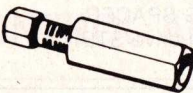
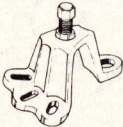
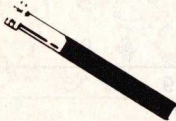


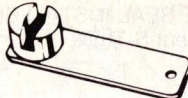
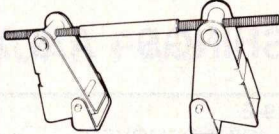
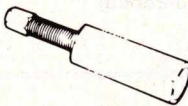
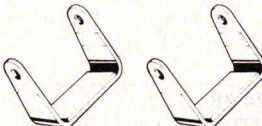
J 3940
WHEEL BEARING CUP
REMOVER
Universal



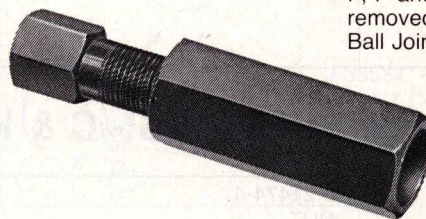
J 6627-A
WHEEL STUD REMOVER

RWD ALL MODELS (CONTINUED)

	J 9519-E BALL JOINT REMOVER AND INSTALLER Except T-Car
	J 23028-01 COIL SPRING REMOVER AND INSTALLER (Use with transmission jack)
	J 24292-B BALL JOINT REMOVER 1982-Current F-Car
	J 25591 SHOCK ABSORBER NUT WRENCH
	J 26407 BALL JOINT SEPARATOR T-Car & P-Car
	J 28733-A REAR HUB SPINDLE REMOVER P-Car (Featured on page 37)
	J 29117-A WHEEL BEARING CUP REMOVER 1980-1985 B-Car, 1980 A & F-Car, 1980-84 C-Car

	J 33093 RELAY ROD ADJUSTMENT GAUGE 1982 to Current F-Car
	J 33432-A FRONT LEAF SPRING COMPRESSOR 1984 to Current Corvette (Includes J 33432-88)
	J 33436 BALL JOINT REMOVER 1984 thru 1988 Corvette
	J 33432-88 FRONT LEAF SPRING COMPRESSOR ADAPTERS (Included with J 33432-A version)

J 23742 BALL JOINT SEPARATOR

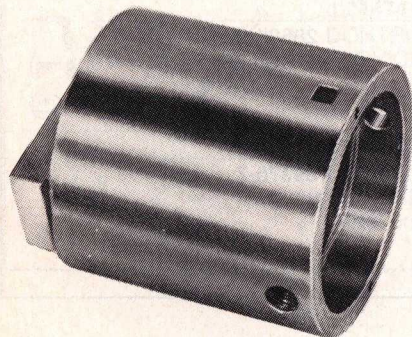


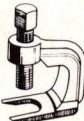
The upper and lower ball joints on all General Motors Rear Wheel Drive vehicles, except F, P and T-Cars, can be easily removed using the J 23742 Ball Joint Separator.

RWD TRUCKS - BALL JOINT & HUB

J 6893-D WHEEL BEARING NUT WRENCH 1/2 AND 3/4 TON 4x4

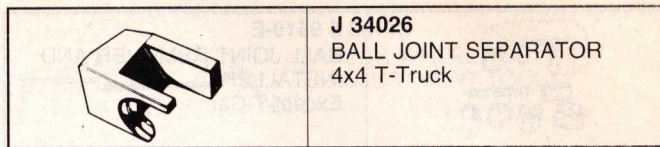
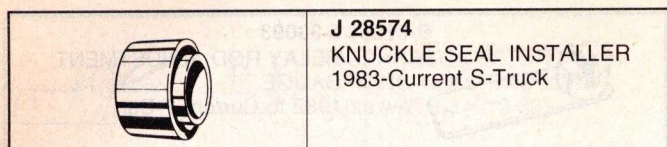
This spanner type wrench can be used on all 1/2 and 3/4 ton four wheel drive front axle wheel bearing nuts. J 6893-D will withstand the new higher torque requirement of 160 foot pounds.



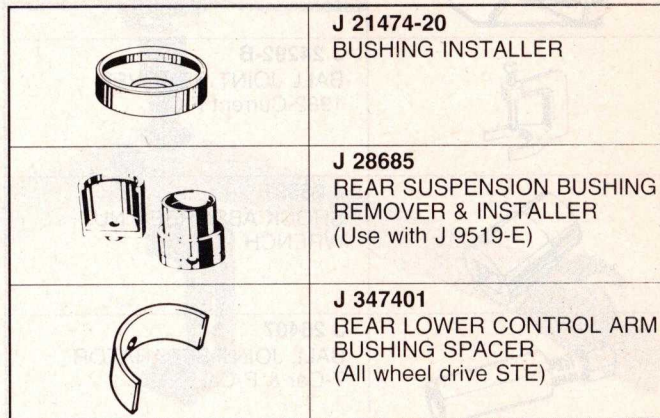
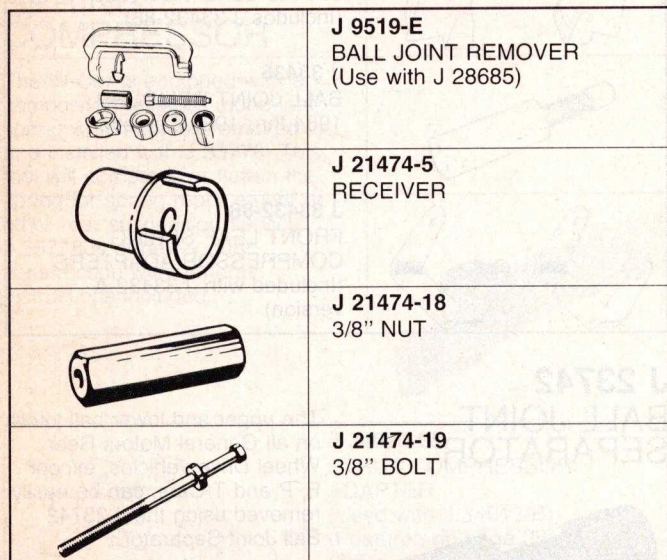
	J 6627-A WHEEL STUD REMOVER
	J 22517-C TORSION BAR UNLOADER 4x4 T-Truck
	J 23454-D BALL JOINT REMOVER AND INSTALLER 4x4 K-Truck through 1986 4x4 V-Truck 1987-Current
	J 25510 WHEEL BEARING NUT WRENCH P-Series with 4 wheel Disc Brakes

SUSPENSION

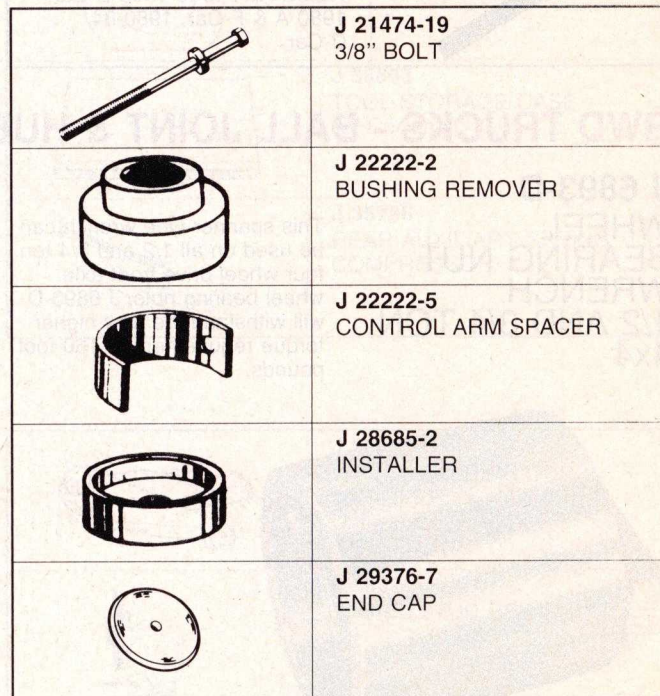
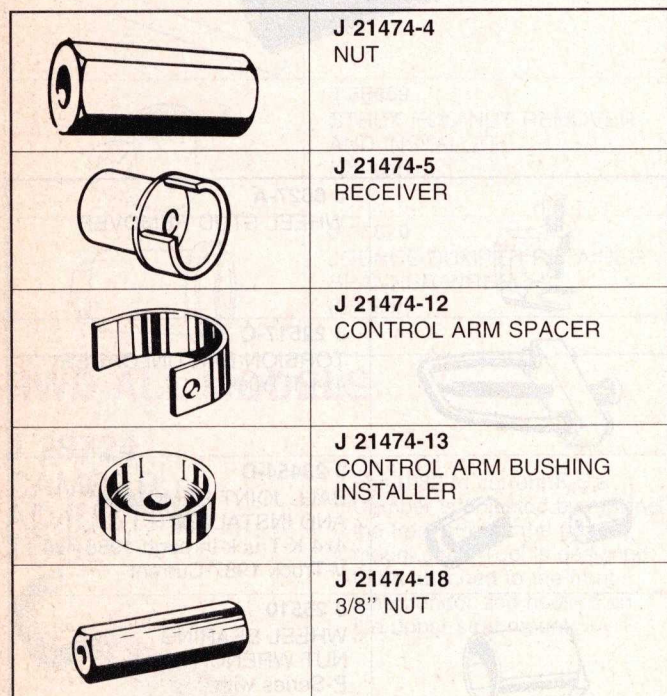
RWD TRUCKS - BALL JOINT & HUB (CONTINUED)



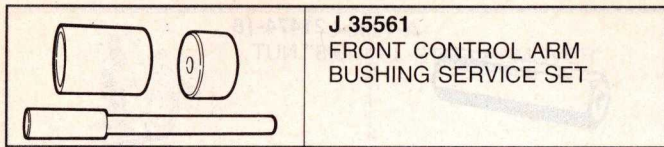
CONTROL ARM BUSHINGS - A & X CAR FWD



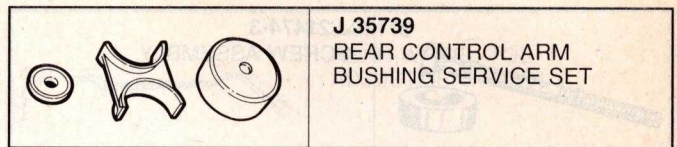
CONTROL ARM BUSHINGS - C & H CAR FWD



CONTROL ARM BUSHING - E/K CAR



J 35561
FRONT CONTROL ARM
BUSHING SERVICE SET



J 35739
REAR CONTROL ARM
BUSHING SERVICE SET

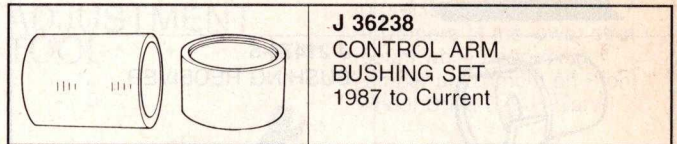
CONTROL ARM BUSHINGS - J, L & N CAR FWD



J 29376-A
REAR CONTROL ARM
BUSHING SERVICE SET



J 29792
FRONT CONTROL ARM
BUSHING SERVICE SET



J 36238
CONTROL ARM
BUSHING SET
1987 to Current

CONTROL ARM BUSHINGS - LEMANS



J 21474-01
CONTROL ARM BUSHING
SERVICE SET



J 29376-A
CONTROL ARM BUSHING
SERVICE SET



J 29376-10
REAR AXLE BUSHING
REMOVER AND INSTALLER



J 36537
FRONT CONTROL ARM
BUSHING REMOVER AND
INSTALLER

CONTROL ARM BUSHINGS - M Car



J 34865
CONTROL ARM BUSHING
SERVICE SET

CONTROL ARM BUSHING - P CAR



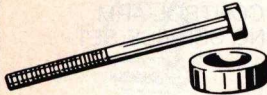

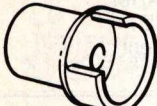
J 21474-01
CONTROL ARM BUSHING
SERVICE SET


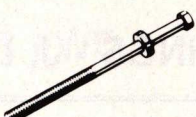


J 37162
CONTROL ARM BUSHING
REMOVER AND INSTALLER
(1988 only)

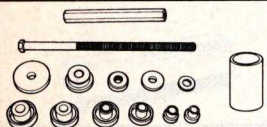
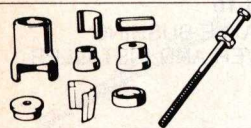
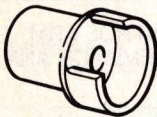

SUSPENSION

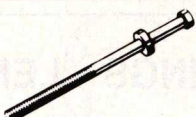

CONTROL ARM BUSHING - T TRUCK (4x4)

	J 21474-3 SCREW ASSEMBLY
	J 21474-4 NUT
	J 21474-5 BUSHING RECEIVER

	J 21474-18 3/8" NUT
	J 21474-19 3/8" BOLT

GENERAL SERVICE

	J 21058 FRONT LOWER CONTROL ARM BUSHING REMOVER & INSTALLER 1964-1976 10-30 Series light truck
	J 21474-01 CONTROL ARM BUSHING SERVICE SET 1964-1977 Includes: J 21474-1, -2, -3, -4, -5, -6, -8, -12, -13
	J 21474-5 BUSHING RECEIVER
	J 21474-18 3/8" NUT All 1978-Current

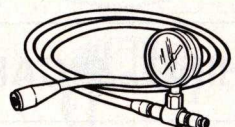
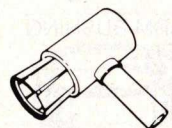
	J 21474-19 3/8" BOLT All 1978-Current
	J 21474-20 BUSHING INSTALLER 1978-Current A & F-Car
	J 21474-23 BUSHING REMOVER 1982-Current F-Car, 1978-1980 A-Car, 1982-Current S-Truck

ELECTRONIC LEVEL CONTROL

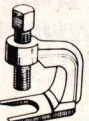

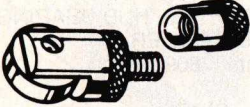
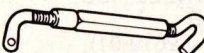
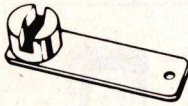
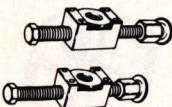
J 34825 ELC TESTER

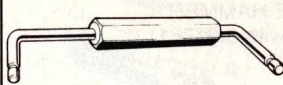
The J 34825 is a valuable test unit for technicians who want to quickly diagnose the electronic level control system on 1978 to Current General Motors vehicles (except manual height control valve systems).



	J 22124-A PRESSURE GAUGE (0-300 P.S.I.)
	J 34649 AIR BLADDER SEALING RING COMPRESSOR/ C & H-Car Patent #4,553,421

WHEELS, TIRES AND ALIGNMENT

	J 6627-A WHEEL STUD REMOVER
	J 9519-40 LOWER BALL JOINT REMOVAL ADAPTER C-10/20 Series (Use with J 9519-E)
	J 23672 RADIAL RUN-OUT ADAPTER
	J 29724 CAMBER ADJUSTING TOOL (Featured on page 44)
	J 33093 RELAY ROD ADJUSTMENT GAUGE 1982 to Current F-Car
	J 34619 CAMBER CASTER ADJUSTER (88 Fiero P-Car only)

	J 38118 REAR WHEEL TOE ADJUSTMENT TOOL
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J 29862 CAMBER ADJUSTMENT TOOL

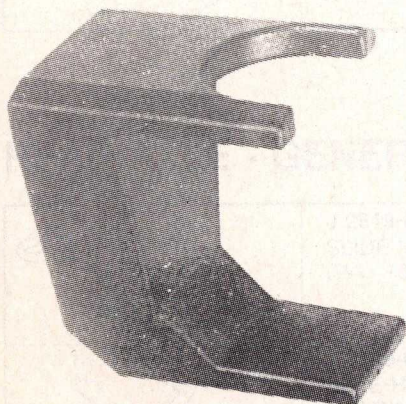


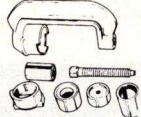

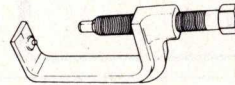
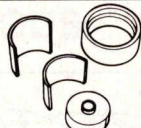
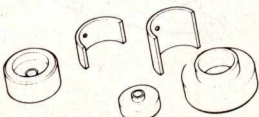
This tool allows the technician to precisely control the movement of the lower strut mount while performing camber adjustment on Front Wheel Drive C & H-Cars.

SUSPENSION 1988-CURRENT C/K TRUCK

J 36607 UPPER BALL JOINT SEPARATOR (4x4 K-TRUCK)

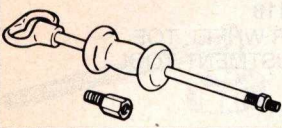
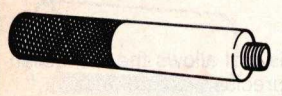

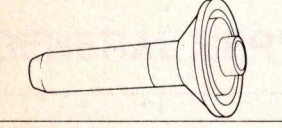
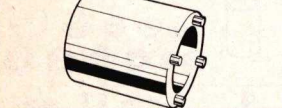
J 36607 is used to separate the ball joint stud from the steering knuckle without damage to the drive axle or the ball stud. J 36607 is installed under the steering knuckle around the ball joint boot, the ball joint nut is then backed off applying pressure to the ball joint.

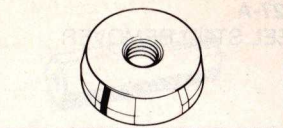
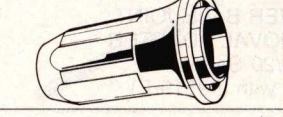
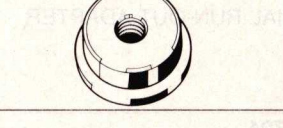
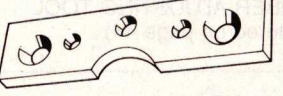


	J 9519-E BALL JOINT REMOVER
	J 9519-40 LOWER BALL JOINT REMOVAL ADAPTER
	J 36202 TORSION BAR UNLOADING TOOL 10/20/30 Series S-10 & S-15 4x4
	J 36364 CONTROL ARM BUSHING SERVICE SET C/K 10/20 Series (Use with J 9519-E)
	J 36618 CONTROL ARM SERVICE SET C/K 30 Series Lower Ball Joint (Use with J 9519-E)

SUSPENSION

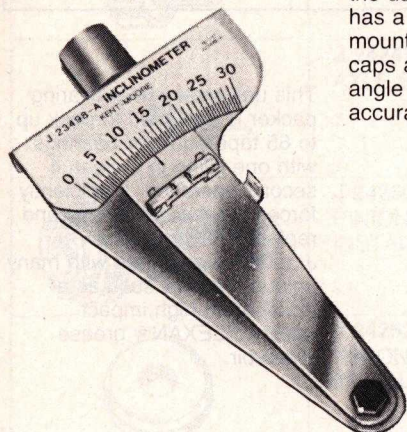
TRACKER (SPRING, STRUT, BALL JOINT, AND HUB)

	J 2619-01 SLIDE HAMMER (Use with J 37781)
	J 8092 DRIVER HANDLE
	J 22888-D BALL JOINT REMOVER
	J 37750 FRONT KNUCKLE INNER SEAL INSTALLER
	J 37763 WHEEL BEARING NUT WRENCH

	J 37772 FRONT WHEEL HUB BEARING RACE REMOVER (Use with J 8092)
	J 37774 FRONT WHEEL HUB BEARING SEAL INSTALLER
	J 37777 FRONT WHEEL HUB BEARING RACE INSTALLER (Use with J 8092)
	J 37781 FRONT WHEEL HUB REMOVER (Use with J 2619-01)

PROP SHAFT & COMPANION FLANGE

J 23498-A DRIVESHAFT INCLINOMETER



The measurement of driveshaft universal joint angles is made accurate ($\pm 1/2^\circ$) and easy with the use of J 23498-A. The tool has a magnetic base for mounting on the joint bearing caps and a bubble level and angle scale for making accurate measurements.

	J 9522-3 "U" JOINT BEARING SEPARATOR (Use with J 9522-5)
	J 9522-5 "U" JOINT BEARING SPACER REMOVER (Use with J 9522-3)
	J 23409 DIAL INDICATOR EXTENSION AND SUPPORT
	J 23410 TORQUE MULTIPLIER 1/2" Input - 3/4" Output 1000 ft. lbs.
	J 23498-20 DRIVE SHAFT INCLINOMETER ADAPTER (Used with J 23498-A)

	J 23694 C.V. PROPELLER SHAFT SEAL INSTALLER
	J 23996 C.V. JOINT REPLACEABLE BALL REMOVER & INSTALLER
	J 25512-2 NEEDLE POINT GREASER (Adapts to 1/8" pipe thread)
	J 34601 RUNOUT GAUGE C Car with 7 1/2" ring gear
	J 35819 RUNOUT GAUGE (Use with J 35819-100)
	J 35819-100 RUNOUT GAUGE ADAPTER SLEEVES (Use with J 35819 on 9 1/2" and 10 1/2" ring gear axles)

J 38460 DIGITAL INCLINOMETER

- Digital display eliminates guesswork.
- 1/10 th degree accuracy
- $\pm 45^\circ$ operating range
- Hold button locks in displayed angle
- Requires 9V battery





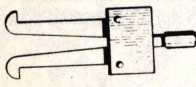
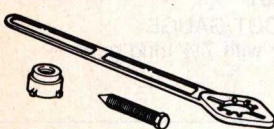
REAR AXLE - GENERAL & MISCELLANEOUS

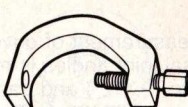
	J 2619-01 SLIDE HAMMER (5/8" - 18 7 1/2 - 13 Thread)
	J 3289-01 AXLE HOUSING BENCH HOLDING FIXTURE (Includes J 3289-20)

	J 3940 UNIVERSAL BEARING CUP REMOVER (Truck)
	J 5853-C TORQUE WRENCH (0-250" lb.) 3/8" Drive

DRIVE AXLE

REAR AXLE - GENERAL & MISCELLANEOUS (CONTINUED)

	J 6627-A WHEEL STUD REMOVER
	J 8001 DIAL INDICATOR SET (Use with J 25025-B Stand Set) .001 inch graduations
	J 8119-01 AXLE BEARING PULLER
	J 8614-01 COMPANION FLANGE HOLDER & REMOVER (Featured on page 59)

	J 35640 PINION SHAFT REMOVER (7½" "C" clip rear axle)
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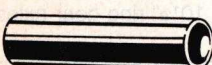

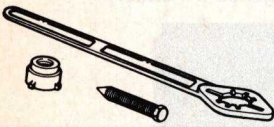

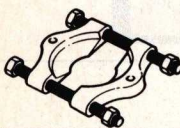

J 33067 WHEEL BEARING PACKER

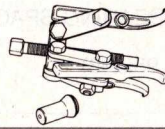

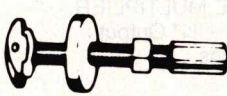
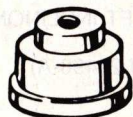
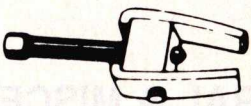


This universal wheel bearing packer is designed to pack up to 65 tapered roller bearings with one filling in a clean 4 second operation. It efficiently forces out the old grease and replaces it with the new. J 33067 is designed with many unique features such as a transparent high impact resistant LEXAN® grease reservoir.

REAR AXLE - CHEVETTE/T-1000

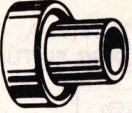
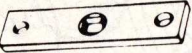
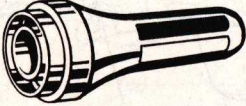

(SEE PAGE 66 FOR PINION SETTING GAUGE COMPONENTS FOR THIS AXLE).

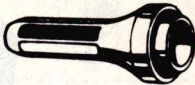



	J 5590 REAR PINION BEARING CONE INSTALLER
	J 8611-01 REAR PINION BEARING CUP INSTALLER
	J 8614-01 COMPANION FLANGE HOLDER AND REMOVER (Featured on page 59)
	J 22399-A PINION SPLINE HOLDER
	J 22912-01 REAR PINION BEARING CONE REMOVER
	J 23598 SIDE BEARING REMOVER PLUG (Use with J 25031)

	J 25031 DIFFERENTIAL SIDE BEARING REMOVER
	J 25589 FRONT PINION BEARING CUP INSTALLER
	J 25593 AXLE SHAFT BEARING REMOVER (Use with J 2619-01)
	J 25594 AXLE BEARING INSTALLER
	J 25599 SPLINED DRIVE COUPLING REMOVER

REAR AXLE - CHEVROLET LUV

(SEE PAGE 66 FOR PINION SETTING GAUGE COMPONENTS FOR THIS AXLE).

	J 24244 DIFFERENTIAL SIDE BEARING INSTALLER
	J 24246 AXLE SHAFT STUD WRENCH
	J 24250 PINION OIL SEAL INSTALLER
	J 24252 PINION BEARING INSTALLER

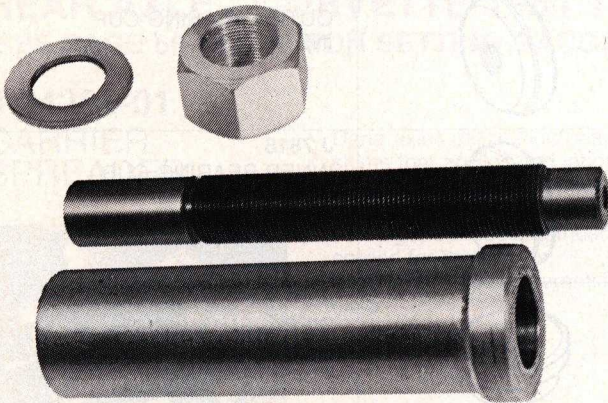
	J 24254 AXLE SHAFT SEAL INSTALLER
	J 24255 AXLE SHAFT SEAL INSTALLER
	J 24256-A PINION BEARING INSTALLER
	J 24259 AXLE SHAFT BEARING CUP INSTALLER


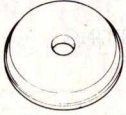
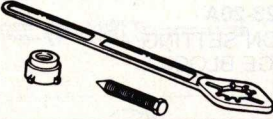

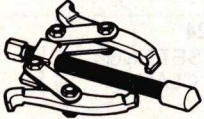
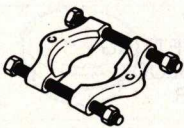
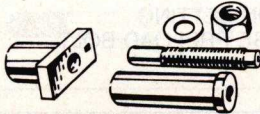
REAR AXLE - CORVETTE 1963-79

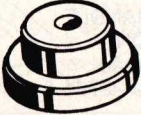
(SEE PAGE 66 FOR PINION SETTING GAUGE COMPONENTS FOR THIS AXLE).

J 24490 SIDE GEAR YOKE BEARING INSTALLER

The inner race on the outer wheel bearing can now be installed after the outer seal and the spindle are in the spindle support.



	J 8609-01 REAR PINION BEARING CONE INSTALLER
	J 8611-01 FRONT PINION BEARING CUP INSTALLER
	J 8614-01 COMPANION FLANGE HOLDER AND REMOVER (Featured on page 59)
	J 22175-A DIFFERENTIAL SIDE BEARING INSTALLER
	J 22888-20 DIFFERENTIAL SIDE BEARING REMOVER
	J 22912-01 REAR PINION BEARING CONE REMOVER
	J 24490 SIDE GEAR YOKE BEARING INSTALLER

	J 8107-4 DIFFERENTIAL SIDE BEARING REMOVER PLUG
	J 8608 REAR PINION BEARING CUP INSTALLER

DRIVE AXLE

REAR AXLE - CORVETTE 1980-82

(SEE PAGE 66 FOR PINION SETTING GAUGE COMPONENTS FOR THIS AXLE).

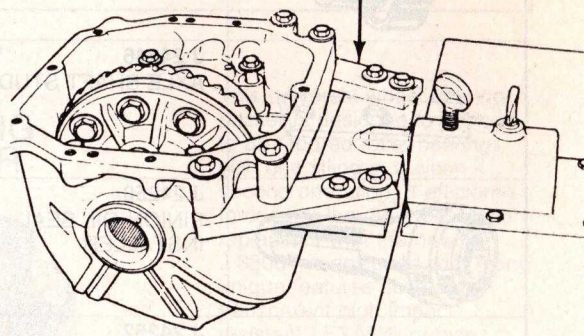
J 34162-A

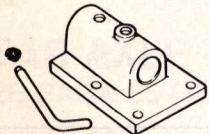
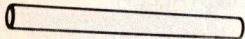

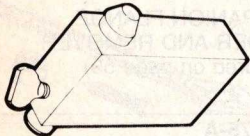

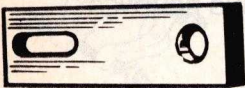
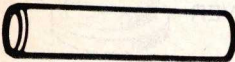
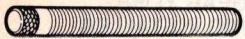
HOLDING FIXTURE

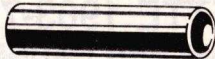

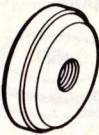
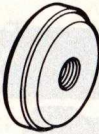
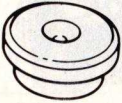
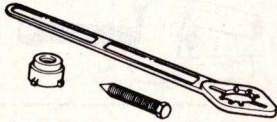
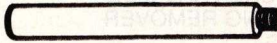
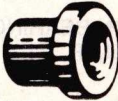
This fixture is used with the J 3289-20 Mount and will hold both the new Corvette axle and the 1980-82 aluminum model.



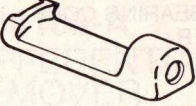

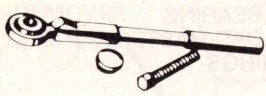
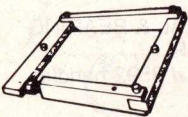
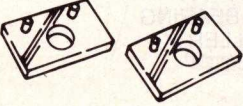

J 34162-A
HOLDING FIXTURE


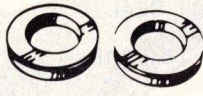
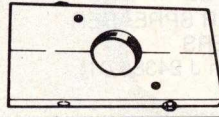
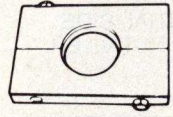
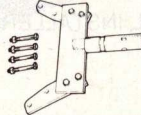


	J 3289-20 HOLDING FIXTURE BENCH MOUNT (Transmission & Differential)
	J 5223-4 PINION SETTING GAUGE ARBOR
	J 5223-14 PINION SETTING GAUGE BOLT
	J 5223-20A PINION SETTING GAUGE BLOCK
	J 5223-23 PINION SETTING GAUGE DISC (2 req'd)
	J 5223-24 PINION SETTING GAUGE CLAMP
	J 5223-27 PINION SETTING GAUGE BLOCK PLUNGER
	J 5223-29 PINION SETTING GAUGE PRELOAD BOLT

	J 5590 PINION BEARING CONE INSTALLER
	J 6125-1B SLIDE HAMMER (Use with J 23129)
	J 7817 OUTER BEARING CUP INSTALLER
	J 7818 INNER BEARING CUP INSTALLER
	J 8107-2 DIFFERENTIAL SIDE BEARING REMOVER PLUG
	J 8614-01 COMPANION FLANGE HOLDER AND REMOVER (Featured on page 59)
	J 21465-13 DRIVER HANDLE EXTENSION 3/4 - 10 Thread (Use with J 22761 & J 8092)
	J 22761 SIDE YOKE BEARING REMOVER

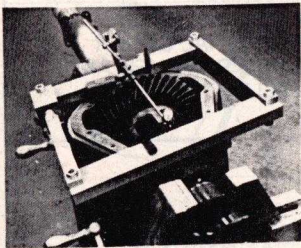
REAR AXLE - CORVETTE 1980-82 (CONTINUED)

	J 23129 PINION OIL SEAL REMOVER (Use with J 6125-1B)
	J 23765 SIDE YOLK BEARING INSTALLER
	J 23781 POSI-TRACTION UNLOADING TOOL
	J 24385-01 AXLE HOUSING SPREADER (Use with J 24385-20)
	J 24385-20 AXLE HOUSING SPREADER ADAPTERS (Use with J 24385-01)
	J 29358 INNER PINION BEARING CUP REMOVER

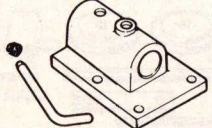
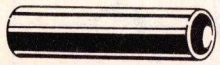
	J 29359 OUTER PINION BEARING CUP REMOVER
	J 29538 SIDE BEARING PRELOAD MASTER BEARINGS
	J 34108-A DIFFERENTIAL SIDE BEARING REMOVER
	J 34165 PINION BEARING CONE REMOVER
	J 34162-A HOLDING FIXTURE (Use with J 3289-20)


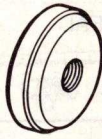
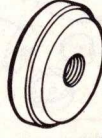

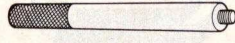
REAR AXLE - CORVETTE 1984 TO CURRENT (MODEL 36) (SEE PAGE 66 FOR PINION SETTING GAUGE COMPONENTS FOR THIS AXLE).

J 24385-01 CARRIER SPREADER




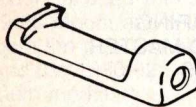
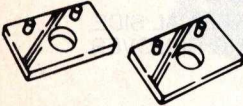




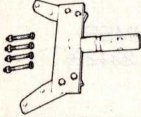
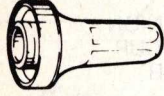
Dana axles utilize side bearing shims that are located inboard of the differential side bearings. With preload on these bearings, the housing must be spread for removal or installation of the differential case.

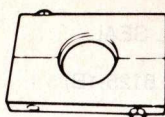
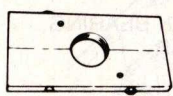
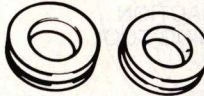


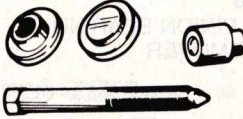

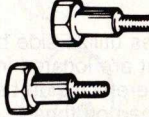
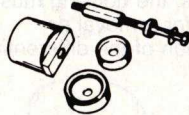
	J 3289-20 CARRIER HOLDING FIXTURE - BENCH MOUNT (Use with J 34162-A)
	J 5590 PINION BEARING CONE INSTALLER

	J 6125-1B SLIDE HAMMER (Use with J 23129)
	J 7817 OUTER PINION BEARING CUP INSTALLER
	J 7818 INNER PINION BEARING CUP INSTALLER
	J 8107-2 SIDE BEARING PULLER PLUG (Use with J 34168)
	J 8592 LONG DRIVER HANDLE (Use with J 34171) (3/4" - 10 Thread)

DRIVE AXLE

REAR AXLE - CORVETTE 1984 TO CURRENT (MODEL 36) (CONTINUED)

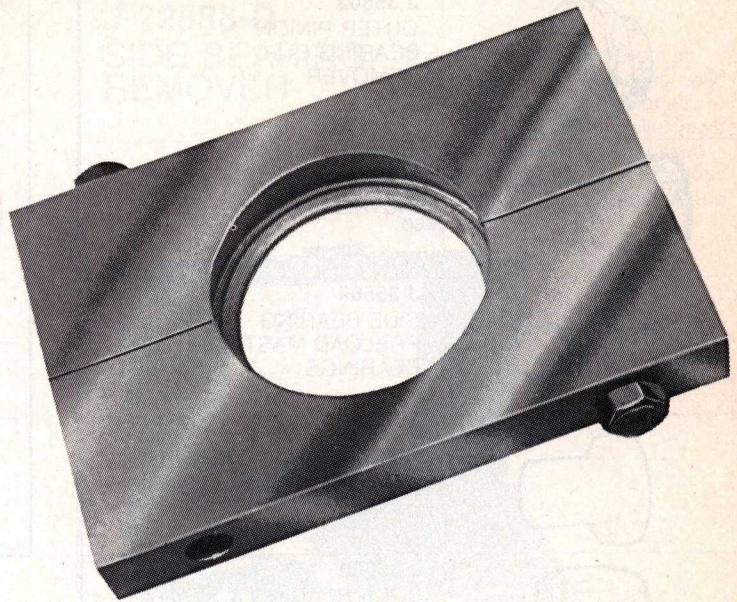
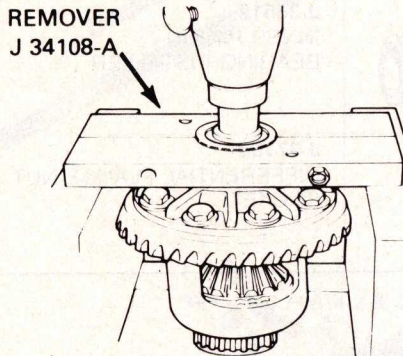
	J 8614-01 COMPANION FLANGE HOLDER AND REMOVER (Featured on page 59)
	J 23129 PINION OIL SEAL REMOVER (Use with J 6125-1B)
	J 24385-20 CARRIER SPREADER ADAPTERS (Use with J 24385-01)
	J 25299 DIFFERENTIAL SIDE BEARING INSTALLER
	J 26938 YOKE SEAL INSTALLER
	J 29358 INNER PINION BEARING CUP REMOVER
	J 29359 OUTER PINION BEARING CUP REMOVER
	J 34162-A CARRIER BENCH FIXTURE (Use with J 3289-20)
	J 34163 PINION OIL SEAL INSTALLER

	J 34165 PINION BEARING CONE REMOVER
	J 34168 DIFFERENTIAL SIDE BEARING REMOVER
	J 34170 SIDE BEARING PRELOAD MASTER BEARINGS
	J 34171 YOKE SEAL & BEARING REMOVER (Use with J 8592 handle)
	J 34172 YOKE BEARING INSTALLER
	J 34174 POSI-TRACTION UNLOADING TOOL
	J 34178 CARRIER SPREADER GAUGE ADAPTER (Use with J 8001)
	J 34179 PINION FLANGE SHOULDER BOLTS (Use with J 8614-01)
	J 34197 DIFFERENTIAL COVER BUSHING REMOVER AND INSTALLER

REAR AXLE - CORVETTE 1985 TO CURRENT (MODEL 44) (SEE PAGE 66 FOR PINION SETTING GAUGE COMPONENTS FOR THIS AXLE)

J 34108-A DIFFERENTIAL SIDE BEARING REMOVER

The Model 44 in the Corvette has larger side bearings that require this tool for removal. J 34108-A is long enough to use in a press or a crossbar puller can be used with J 8107-4 Plug used as a center point.


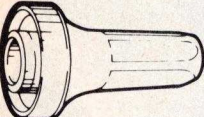

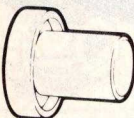
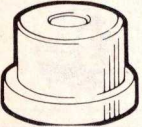


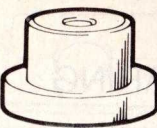
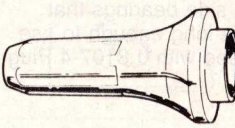
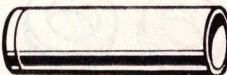

	J 8001 DIAL INDICATOR SET (Use with J 34178)
	J 8592 LONG DRIVER HANDLE (3/4" - 10 Thread)
	J 8614-01 COMPANION FLANGE HOLDER AND REMOVER (Featured on page 59)
	J 24385-01 DIFFERENTIAL CARRIER SPREADER
	J 24385-20 CARRIER SPREADER ADAPTER (Use with J 24385-01)
	J 24771 PINION DEPTH GAUGE
	J 34108-A DIFFERENTIAL SIDE BEARING REMOVER

	J 34161 REAR HUB DRIVE TORX #55
	J 34162-A HOLDING FIXTURE (Use with J 3289-20)
	J 34174 POSI-TRACTION UNLOADING TOOL
	J 34178 CARRIER SPREADER GAUGE ADAPTER (Use with J 8001)
	J 34197 DIFFERENTIAL COVER BUSHING REMOVER AND INSTALLER
	J 34501 POSI-TRACTION SERVICE ADAPTER (Use with J 34174)
	J 35501 INNER PINION BEARING CUP REMOVER

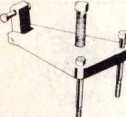

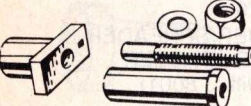

DRIVE AXLE

REAR AXLE - CORVETTE 1985 TO CURRENT (MODEL 44) (CONTINUED)

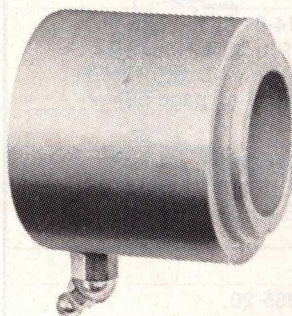
	J 35502 OUTER PINION BEARING CUP REMOVER
	J 35503 PINION SEAL INSTALLER
	J 35505 SIDE BEARING PRELOAD MASTER BEARINGS
	J 35508 DIFFERENTIAL SIDE BEARING INSTALLER
	J 35509 YOKE BEARING & SEAL REMOVER

	J 35510 YOKE BEARING INSTALLER
	J 35511 YOKE SEAL INSTALLER
	J 35512 INNER PINION BEARING INSTALLER
	J 37163 DIFFERENTIAL FLANGE NUT SOCKET

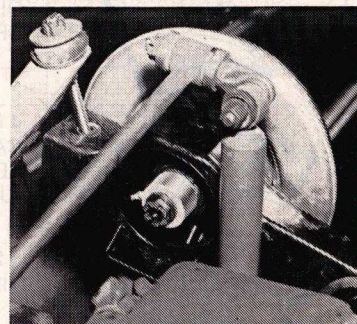
REAR SPINDLE - CORVETTE 1965-82

	J 22602-01 DRIVE SPINDLE REMOVER
	J 24489 AXLE BEARING REMOVER (Use with J 8433 puller)
	J 24490 REAR WHEEL SPINDLE INSTALLER
	J 24626 SHIM SELECTOR

J 24488 REAR WHEEL BEARING GREASER



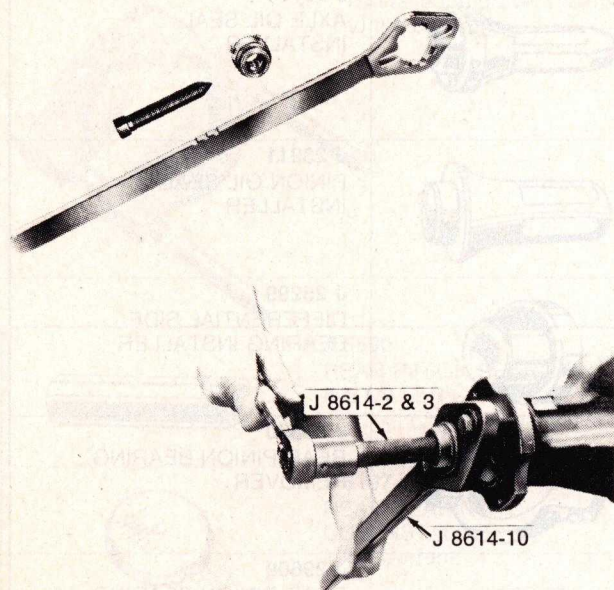
This tool makes it possible to grease the rear inner wheel bearings on the 1965 thru 1982 Corvette. Simply detach axle drive shaft, remove spindle nut, install tool over spindle and reinstall nut. Using hand grease gun, lubricate inner bearing with three tablespoons of chassis lubricant.



REAR AXLE 6 $\frac{1}{2}$ " RING GEAR (VEGA & ASTRE 1971-77)

J 8614-01 COMPANION FLANGE HOLDER & REMOVER

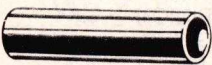
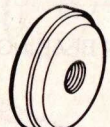
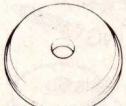
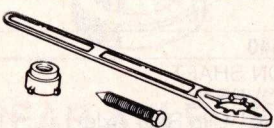

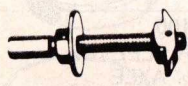
This tool has a long handle for holding the flange while the pinion nut is tightened. A special nut and forcing screw also permits pressing pinion out of the flange.

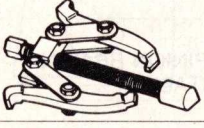

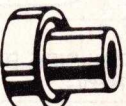
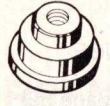

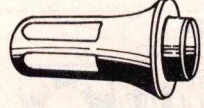


J 22888-D SIDE BEARING REMOVER

The design of the differential side bearing case exposes only a minimum area of the inner race. The J 22888-D puller jaws engage the bearing inner race through this small area making the bearing removal a quick and easy job.



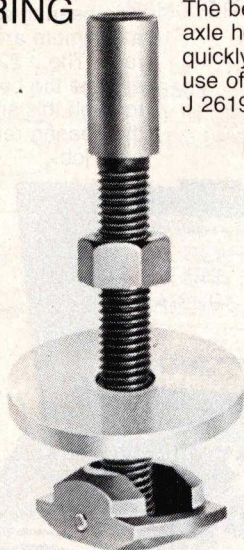
	J 5590 REAR PINION BEARING CONE INSTALLER
	J 7817 FRONT PINION BEARING CUP INSTALLER
	J 8611-01 REAR PINION BEARING CUP INSTALLER
	J 8614-01 PINION FLANGE REMOVER (Featured on page 59)
	J 22912-01 REAR PINION BEARING CONE REMOVER
	J 22813-01 AXLE BEARING REMOVER (Use with J 2619-01)

	J 22888-20 DIFFERENTIAL SIDE BEARING REMOVER
	J 23598 DIFFERENTIAL SIDE BEARING REMOVER PLUG (Use with J 22888-20)
	J 23610 DIFFERENTIAL SIDE BEARING INSTALLER
	J 23765 AXLE BEARING INSTALLER
	J 23771 AXLE OIL SEAL INSTALLER
	J 23911 PINION OIL SEAL INSTALLER



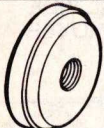
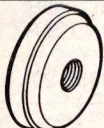


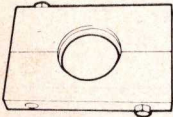
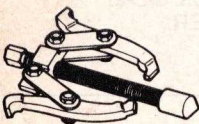
DRIVE AXLE


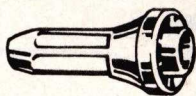
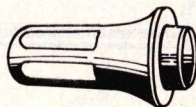



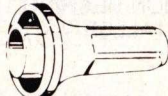
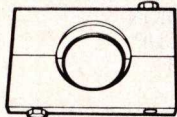
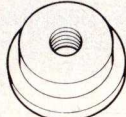
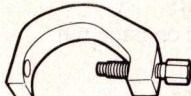
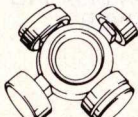

REAR AXLE 7 $\frac{1}{2}$ " & 7 $\frac{5}{8}$ " RING GEAR - 1975 TO CURRENT (SEE PAGE 66 FOR PINION SETTING GAUGE COMPONENTS FOR THIS AXLE).

J 22813-01 AXLE BEARING REMOVER



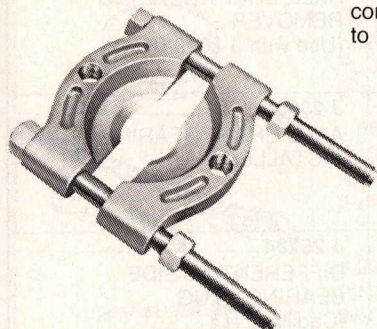
The bearing is pressed into axle housing and can be quickly removed with the use of this tool and the J 2619-01 Slide Hammer.

	J 5590 REAR PINION BEARING CONE INSTALLER
	J 6197-A REAR PINION CUP INSTALLER ("O" Axle prior to 1981)
	J 7817 FRONT PINION BEARING CUP INSTALLER
	J 7818 REAR PINION BEARING CUP INSTALLER
	J 8107-2 DIFFERENTIAL SIDE BEARING REMOVER PLUG
	J 8614-01 PINION FLANGE REMOVER (Featured on page 59)
	J 21493-B REAR PINION BEARING CONE REMOVER ("O" Axle prior to 1981)
	J 22888-20 SIDE BEARING REMOVER (Use with J 8107-2)

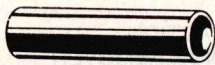



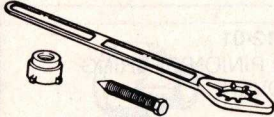
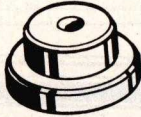
	J 23765 AXLE BEARING INSTALLER
	J 23771 AXLE OIL SEAL INSTALLER
	J 23911 PINION OIL SEAL INSTALLER
	J 25299 DIFFERENTIAL SIDE BEARING INSTALLER
	J 25320 REAR PINION BEARING REMOVER
	J 29609 REAR PINION BEARING CUP INSTALLER ("O" Axle 1981 to current)
	J 33782 FRONT PINION BEARING CUP INSTALLER
	J 33868 REAR PINION BEARING REMOVER
	J 34974 AXLE BEARING INSTALLER "M" Van 7 $\frac{1}{2}$ Axle
	J 35640 PINION SHAFT REMOVER (7 $\frac{1}{2}$ " "C" Clip Rear Axle)
	J 35819 RUNOUT GAUGE (Use with J 35819-100)
	J 35819-100 ADAPTER SLEEVES 9 $\frac{1}{2}$ ", 10 $\frac{1}{2}$ " AXLE (Use with J 35819)

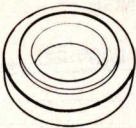
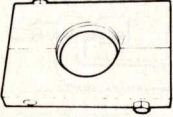
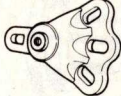

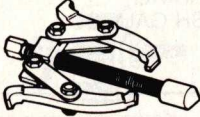
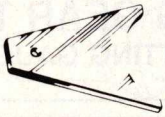
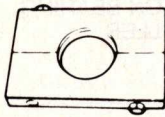
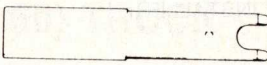
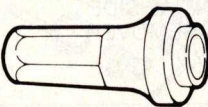
REAR AXLE - BORG WARNER 1985 TO CURRENT (SEE PAGE 66 FOR PINION SETTING GAUGE COMPONENTS FOR THIS AXLE).

J 22912-01 REAR PINION BEARING REMOVER



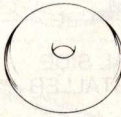

This is an adjustable bearing remover that has knife like edges that fit into very tight areas. In all cases, the inner race of the bearing must be contacted to prevent damage to the bearing.

	J 5590 REAR PINION BEARING INSTALLER
	J 6197-A REAR BEARING CUP INSTALLER 1987-Current
	J 7817 FRONT BEARING CUP INSTALLER
	J 7818 REAR BEARING CUP INSTALLER 1985-86
	J 8614-01 COMPANION FLANGE REMOVER AND INSTALLER (Featured on page 59)
	J 8107-4 DIFFERENTIAL SIDE BEARING REMOVER PLUG (Use with J 22888-20)

	J 8853-01 AXLE BEARING AND RETAINER INSTALLER
	J 21493-B REAR BEARING REMOVER 1987-Current
	J 21579 AXLE SHAFT REMOVER (Use with J 2619-01)
	J 21784 SIDE BEARING INSTALLER
	J 22888-20 SIDE BEARING REMOVER (Use with J 8107-4)
	J 25588 SIDE BEARING SHIM INSTALLER
	J 34165 REAR PINION BEARING REMOVER
	J 35117 FILLER PLUG REMOVAL TOOL
	J 35119 PINION SEAL INSTALLER



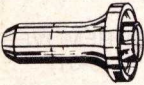

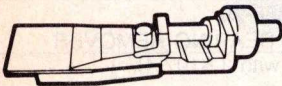
REAR AXLE - 8 1/2" RING GEAR 1967 TO CURRENT (SEE PAGE 66 FOR PINION SETTING GAUGE COMPONENTS FOR THIS AXLE).

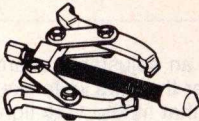
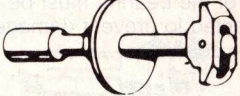

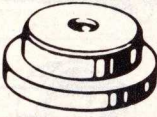
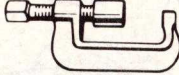
	J 8107-4 DIFFERENTIAL SIDE BEARING REMOVER PLUG (Use with J 22888-20)
	J 8608 REAR PINION BEARING CUP INSTALLER

	J 8611-01 FRONT PINION BEARING CUP INSTALLER
	J 8612-B REAR PINION BEARING CONE REMOVER


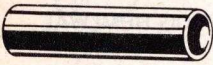
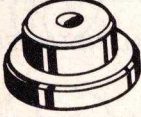
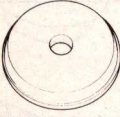
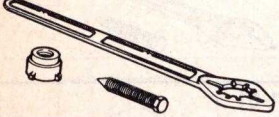

DRIVE AXLE

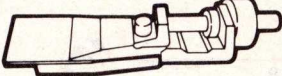
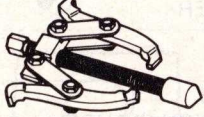
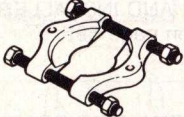

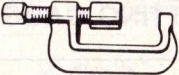
REAR AXLE - 8¹/₂" RING GEAR 1967 TO CURRENT (CONTINUED)

	J 8614-01 PINION FLANGE REMOVER (Featured on page 59)
	J 21128 AXLE SEAL INSTALLER
	J 22388 PINION OIL SEAL INSTALLER
	J 22761 DIFFERENTIAL SIDE BEARING INSTALLER
	J 22779 SIDE BEARING BACKLASH GAUGE

	J 22888-20 DIFFERENTIAL SIDE BEARING REMOVER
	J 23689 AXLE SHAFT BEARING REMOVER (Use with J 2619-01)
	J 23690 AXLE SHAFT BEARING INSTALLER
	J 25284 DIFFERENTIAL SIDE BEARING PLUG (Cadillac) (Use with J 22888-20)
	J 26252 POSI-TRACTION GOVERNOR REMOVER (Eaton-truck axle)

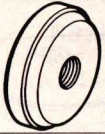


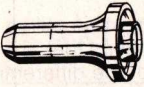
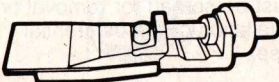

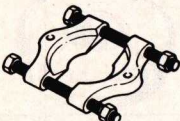
REAR AXLE - 8⁷/₈" RING GEAR TRUCK 1963 TO CURRENT (SEE PAGE 66 FOR PINION SETTING GAUGE COMPONENTS FOR THIS AXLE).

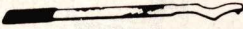
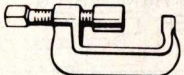


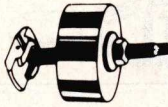
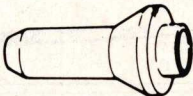
	J 270-14 REAR PISTON BEARING CUP INSTALLER
	J 5590 REAR PINION BEARING CONE INSTALLER
	J 8107-4 DIFFERENTIAL SIDE BEARING REMOVER PLUG
	J 8611-01 FRONT PINION BEARING CUP INSTALLER (Use with J 8092)
	J 8614-01 PINION FLANGE REMOVER (Featured on page 59)
	J 22175-A DIFFERENTIAL SIDE BEARING INSTALLER

	J 22779 SIDE BEARING BACKLASH GAUGE
	J 22888-20 DIFFERENTIAL SIDE BEARING REMOVER (Use with J 8107-4)
	J 22912-01 REAR PINION BEARING REMOVER
	J 23911 PINION SEAL INSTALLER
	J 26252 POSI-TRACTION GOVERNOR REMOVER (Eaton-truck axle)


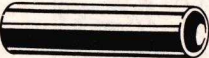
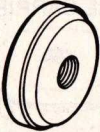
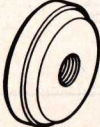
REAR AXLE - 9¹/₂" RING GEAR 1982 TO CURRENT



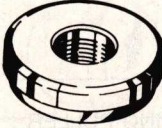

(SEE PAGE 66 FOR PINION SETTING GAUGE COMPONENTS FOR THIS AXLE).

	J 7818 REAR PINION BEARING CUP INSTALLER
	J 8107-3 DIFFERENTIAL SIDE BEARING REMOVAL PLUG (Use with J 22888-20)
	J 8614-01 PINION FLANGE REMOVER (Featured on page 59)
	J 22388 PINION OIL SEAL INSTALLER
	J 22779 SIDE BEARING BACKLASH GAUGE
	J 22888-20 DIFFERENTIAL SIDE BEARING REMOVER
	J 22912-01 REAR PINION BEARING CONE REMOVER

	J 24429 SIDE BEARING BACKLASH SPANNER WRENCH
	J 26252 POSI-TRACTION GOVERNOR REMOVER (Eaton-truck axle)
	J 29709 WHEEL BEARING INSTALLER
	J 29710 DIFFERENTIAL SIDE BEARING INSTALLER
	J 29712 WHEEL BEARING REMOVER
	J 29713 AXLE SEAL INSTALLER





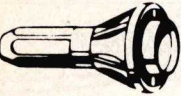
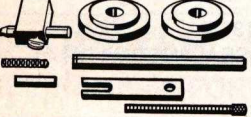
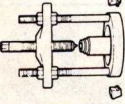
REAR AXLE - 9³/₄" RING GEAR (DANA 60) TRUCK

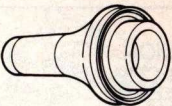
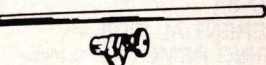
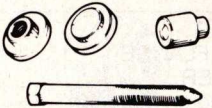
	J 2222-C WHEEL BEARING NUT WRENCH
	J 5590 REAR PINION BEARING CONE INSTALLER
	J 7817 LOWER KING PIN BEARING CUP INSTALLER
	J 7818 REAR PINION BEARING CUP INSTALLER

	J 8001 DIAL INDICATOR SET (Use with J 34178)
	J 8107-3 DIFFERENTIAL SIDE BEARING PULLER PLUG
	J 8608 OUTER WHEEL BEARING INSTALLER
	J 8614-01 PINION FLANGE HOLDER (Featured on page 59)

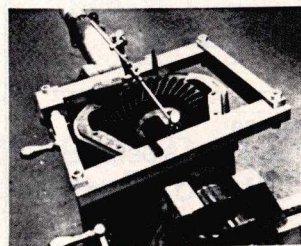
DRIVE AXLE

REAR AXLE - 9³/₄" RING GEAR (DANA 60) TRUCK (CONTINUED)

	J 23690 DIFFERENTIAL SIDE BEARING INSTALLER
	J 21465-17 EXTENSION HOUSING BUSHING REMOVER & INSTALLER
	J 24426 OUTER WHEEL BEARING CUP INSTALLER
	J 24427 INNER WHEEL BEARING CUP INSTALLER
	J 24428 AXLE SHAFT SEAL INSTALLER
	J 24771 PINION SETTING GAUGE
	J 29721 DIFFERENTIAL SIDE BEARING REMOVER


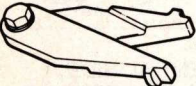


	J 33831 PINION OIL SEAL INSTALLER
	J 34178 CARRIER SPREADER GAUGE ADAPTER (Use with J 8001)
	J 34502 POSITRACTION UNLOADER

J 24385-01 DIFFERENTIAL HOUSING SPREADER




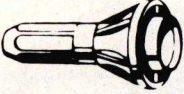
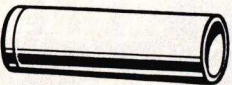
The Dana axles utilize side bearing shims that are located inboard of the differential side bearings. With preload on these bearings, the housing must be spread for removal or installation of the differential case.


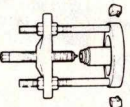

REAR AXLE - 10¹/₂" RING GEAR (DANA 70) - 20 & 30 SERIES

	J 2222-C WHEEL BEARING NUT WRENCH
	J 3940 BEARING CUP REMOVER
	J 8001 DIAL INDICATOR SET (Use with J 34178)
	J 8107-3 SIDE BEARING PULLER PLUG


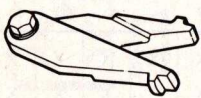
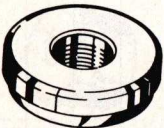
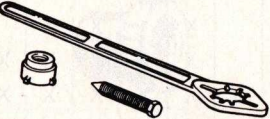
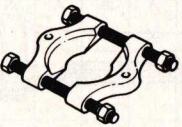


	J 22912-01 REAR PINION BEARING CONE REMOVER
	J 24384 PINION OIL SEAL INSTALLER
	J 24385-01 DIFFERENTIAL CARRIER SPREADER
	J 24426 OUTER WHEEL BEARING CUP INSTALLER




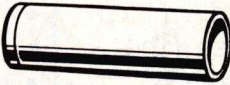
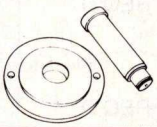
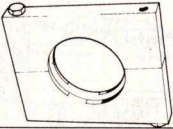
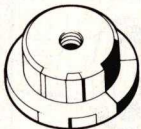
REAR AXLE - 10¹/₂" RING GEAR (DANA 70) - 20 & 30 SERIES (CONTINUED)

	J 24427 INNER WHEEL BEARING CUP INSTALLER
	J 24428 AXLE SHAFT SEAL INSTALLER
	J 24433 REAR PINION BEARING CONE INSTALLER

	J 25510 REAR WHEEL HUB NUT WRENCH (P-30 4 Wheel Disc Brakes)
	J 29721 DIFFERENTIAL SIDE BEARING REMOVER
	J 34178 CARRIER SPREADER GAUGE ADAPTER (Use with J 8001)

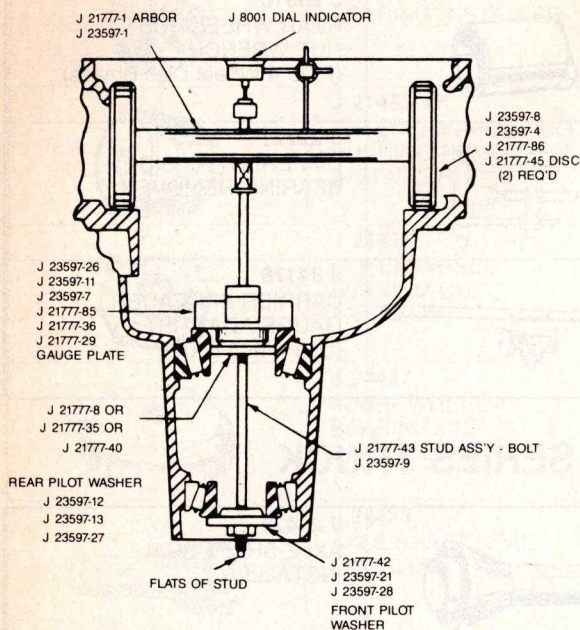
REAR AXLE - GM 10¹/₂" RING GEAR 20-30 SERIES TRUCK

	J 2222-C WHEEL BEARING NUT WRENCH
	J 3940 BEARING CUP REMOVER
	J 8608 OUTER PINION BEARING CUP INSTALLER
	J 8614-01 PINION FLANGE HOLDER (Featured on page 59)
	J 22912-01 REAR PINION CONE REMOVER
	J 24426 OUTER WHEEL BEARING CUP INSTALLER
	J 24427 INNER WHEEL BEARING CUP INSTALLER

	J 24428 AXLE SHAFT SEAL INSTALLER
	J 24429 SIDE BEARING ADJUSTMENT SPANNER
	J 24430 DIFFERENTIAL SIDE BEARING INSTALLER
	J 24433 REAR PINION BEARING CONE INSTALLER
	J 34943 PINION BEARING INSTALLER
	J 37623 PINION BEARING REMOVER 1988-Current R, V & P trucks.
	J 37624 PINION BEARING CUP INSTALLER 1988-Current R, V & P trucks.

DRIVE AXLE

PINION SETTING GAUGES & COMPONENTS

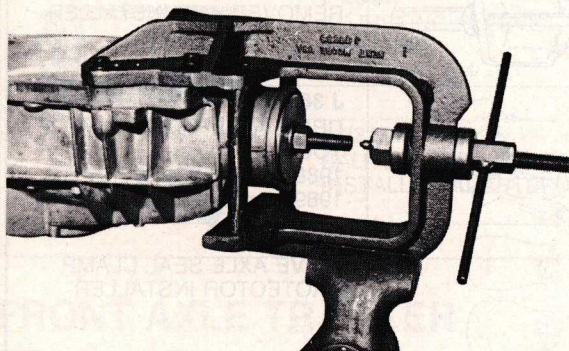






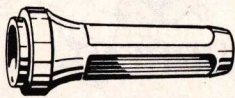

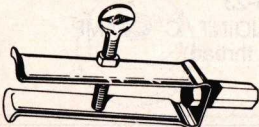
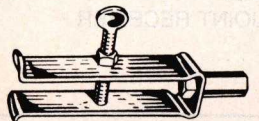
TOOL #	DESCRIPTION	J 21777-B SET	J 23597-B SET	J 34925 SET	BORG WARNER - 1985 TO CURRENT	CHEVETTE - T-1000 (T-CAR)	CHEVROLET LUV REAR AXLE	CHEVROLET LUV FRONT AXLE	CORVETTE 1963-79	CORVETTE 1980-82	CORVETTE 1984 TO CURRENT (36)	CORVETTE 1985 TO CURRENT (44)	E-CAR FRONT DRIVE 1979 TO 1985	7-1/2" & 7-5/8" AXLE 1975 TO CURRENT	8-1/2" AXLE (1967 TO CURRENT)	8-7/8" 12 BOLT	8-7/8" TRUCK AXLE (1963 TO CURRENT)	9-1/2" TRUCK AXLE (1982 TO CURRENT)
J 8001	DIAL INDICATOR GAUGE SET	•	•	•	X	X	X	X	X	X	X	X	X	X	X	X	X	X
J 21777-1	ARBOR	•	•	•					X	X			X	X	X	X	X	X
J 21777-8	REAR PILOT WASHER	•	•	•						X			X					X
-23	GAUGE PLATE															X		
-29	GAUGE PLATE	•	•	•											X			
-35	REAR PILOT WASHER	•	•	•					X						X			
-36	GAUGE PLATE								X								X	
-40	REAR PILOT WASHER	•	•	•										X		X	X	
-42	FRONT PILOT WASHER	•	•	•	X				X					X	X	X	X	X
-43	STUD ASSEMBLY - BOLT	•	•	•	X	X		X	X	X	X	X	X	X	X	X	X	X
-45	SIDE BEARING DISC - 2 REQ'D	•	•	•	X				X				X	X	X	X	X	
-75	GAUGE & PILOT													X				
-85	GAUGE & PLATE																	X
-86	SIDE BEARING DISC - 2 REQ'D																	X
J 23597-1	ARBOR		•	•	X	X	X	X			X	X		X				
-4	SIDE BEARING DISC - 2 REQ'D		•	•		X		X										
-7	GAUGE PLATE						X											
-8	SIDE BEARING DISC - 2 REQ'D						X				X	X						
-9	STUD ASSEMBLY - BOLT						X											
-11	GAUGE PLATE		•	•			X							X				
-12	REAR PILOT WASHER		•	•			X							X				
-13	REAR PILOT WASHER		•	•		X												
-21	FRONT PILOT WASHER		•	•		X												
-26	GAUGE PLATE							X										
-27	REAR PILOT WASHER							X										
-28	FRONT PILOT WASHER							X										
-30	GAUGE PLATE					X												
J-35118-A	PINION SETTING GAUGE				X													
J 35506-A	PINION SETTING ADAPTER KIT										X	X						





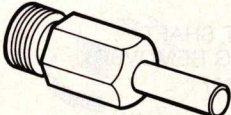


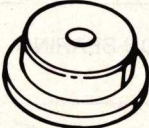
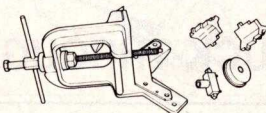
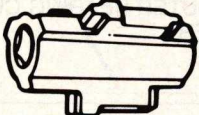
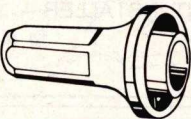
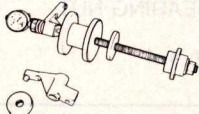
FRONT AXLE - 1988 GMC SIERRA/CHEVROLET SILVERADO

J 36598 HOLDING FIXTURE AND PINION BEARING SERVICE TOOL

J 36598 will press the drive pinion from the housing while serving as a holding fixture for 10/20/30 series front axles. This multi-purpose tool will also remove and install both inner and outer pinion bearing cups from the differential case.

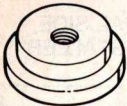
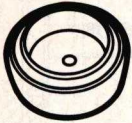
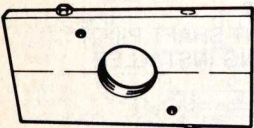
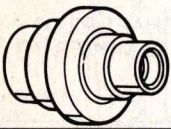
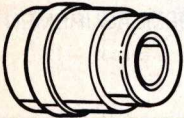
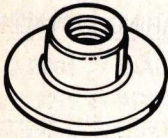
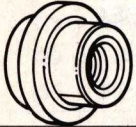
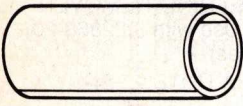


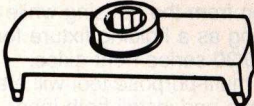
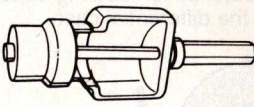
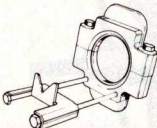
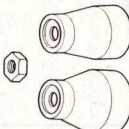
	J 8107-2 SIDE BEARING PULLER PILOT Use with J 22888-20 (10/20 Series)
	J 8612-B PINION INNER BEARING REMOVER
	J 21551 INPUT SHAFT BEARING REMOVER
	J 22761 DIFFERENTIAL SIDE BEARING INSTALLER
	J 22833 OUTPUT SHAFT SEAL INSTALLER
	J 22888-20 SIDE BEARING REMOVER
	J 29369-1 AXLE TUBE BEARING REMOVER (10/20 Series)
	J 29369-2 AXLE TUBE BEARING REMOVER (30 Series)

	J 29710 DIFFERENTIAL SIDE BEARING INSTALLER
	J 29763 DIAL INDICATOR
	J 33842 OUTPUT SHAFT PILOT BEARING INSTALLER
	J 34011 OUTPUT SHAFT PILOT BEARING REMOVER
	J 34047-3 BACKLASH MEASUREMENT ADAPTER
	J 35512 INNER BEARING INSTALLER
	J 36366 PINION OIL SEAL INSTALLER
	J 36597 SIDE BEARING REMOVER PILOT (Use with J 22888-20) (30 Series)
	J 36598 HOLDING FIXTURE AND PINION BEARING SERVICE TOOL
	J 36599 SIDE BEARING ADJUSTING NUT WRENCH 10/20/30 Series - J 36615 also req'd for 30 series.
	J 36600 OUTPUT SHAFT SEAL INSTALLER (10/20 Series)
	J 36601 PINION SHIM SELECTOR (Used with J 29763 Dial Indicator - not included)

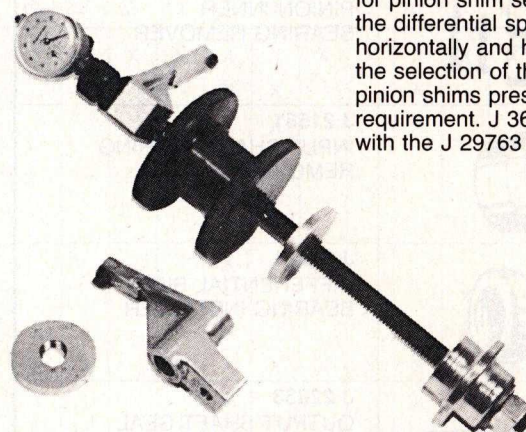
DRIVE AXLE

FRONT AXLE - 1988 GMC SIERRA/CHEVROLET SILVERADO (CONTINUED)

	J 36603 SIDE BEARING CUP INSTALLER (10/20/30 Series)
	J 36605 FRONT KNUCKLE SEAL INSTALLER (4x4)
	J 36606 INNER PINION BEARING REMOVER (30 Series)
	J 36609 AXLE TUBE BEARING INSTALLER (10/20/30 Series)
	J 36611 OUTPUT SHAFT BEARING REMOVER (30 Series)
	J 36612 OUTPUT SHAFT BEARING INSTALLER Use with J 8092 (10/20 Series)
	J 36613 OUTPUT SHAFT BEARING INSTALLER Use with J 8092 (30 Series)
	J 36614 INNER PINION BEARING INSTALLER


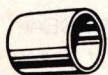
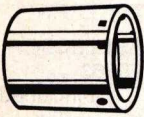
	J 36615 SIDE BEARING ADJUSTING WRENCH (30 Series)
	J 36616 AXLE MOUNT BUSHING REMOVER AND INSTALLER
	J 36652 DRIVE AXLE CLAMP SWAGE TOOL 1988½ -current K 30 1989-current K 10/20
	J 36845 DRIVE AXLE SEAL CLAMP PROTECTOR INSTALLER

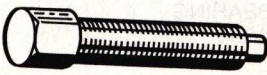
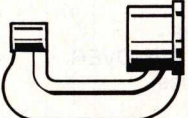
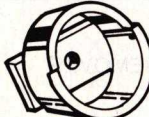
J 36601 PINION SHIM SELECTOR






J 36601 is used in place of the pinion shaft to provide a direct reading, on the dial indicator, for pinion shim selection. Since the differential splits horizontally and has no cover, the selection of the proper pinion shims presents a special requirement. J 36601 is used with the J 29763 Dial Indicator.

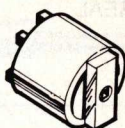

FRONT AXLE - K TRUCK THROUGH 1986 V TRUCK 1987-CURRENT

	J 6368 PINION OUTER BEARING CUP INSTALLER
	J 6382-3 BALL JOINT INSTALLER ADAPTER
	J 6893-D WHEEL BEARING NUT WRENCH ½ & ¾ ton 4x4



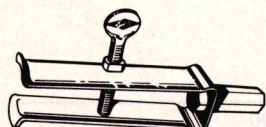
	J 9519-18 BALL JOINT PRESSING SCREW (Acme thread)
	J 9519-23 BALL JOINT "C" CLAMP (Acme thread)
	J 9519-28 BALL JOINT RECEIVER



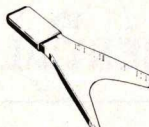
FRONT AXLE - K TRUCK THROUGH 1986 V TRUCK 1987-CURRENT (CONTINUED)

	J 23445-A BEARING INSTALLER
	J 23447 ADJUSTING SLEEVE SPANNER ½ & ¾ ton 4x4
	J 23454-D BALL JOINT REMOVER AND INSTALLER ADAPTER

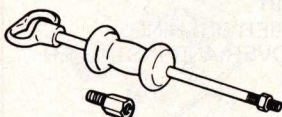

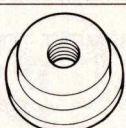
	J 26878-A WHEEL BEARING NUT WRENCH (30 Series)
	J 28648 INNER AXLE TUBE SEAL INSTALLER

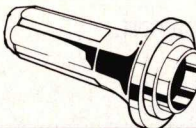
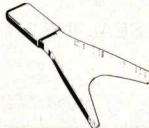
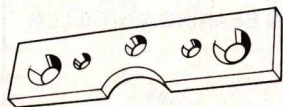
FRONT AXLE TRACKER

	J 8092 DRIVER HANDLE (Use with J 33833 and J 37770)
	J 23907 SLIDE HAMMER (Use with J 29369-1)
	J 29369-1 AXLE BEARING REMOVER (Use with J 23907)

	J 33833 AXLE BEARING INSTALLER (Use with J 8092)
	J 37770 AXLE SHAFT OIL SEAL INSTALLER (Use with J 8092)
	J 37780 AXLE SHAFT REMOVER

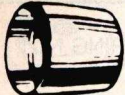



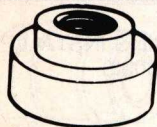
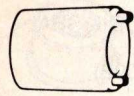
REAR AXLE - TRACKER

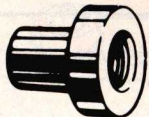

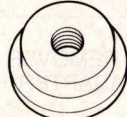
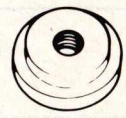
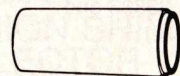
	J 2619-01 SLIDE HAMMER (Use with J 37781)
	J 8092 DRIVER HANDLE
	J 29039 AXLE SHAFT INNER OIL SEAL INSTALLER

	J 37771 REAR AXLE BEARING RETAINER SEAL INSTALLER
	J 37780 AXLE SHAFT REMOVER
	J 37781 REAR AXLE SHAFT AND BRAKE DRUM REMOVER (Use with J 2619-01)



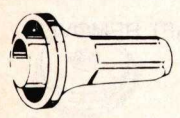
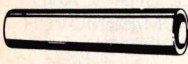
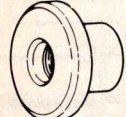
DRIVE AXLE

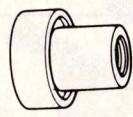
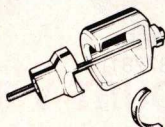
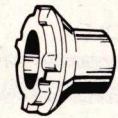
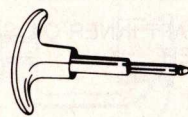

FRONT DRIVE AXLE & DIFFERENTIAL - SERIES 9, 10, 11 LUV

	J 26234 PINION OIL SEAL INSTALLER
	J 29015 FRONT HUB INNER BEARING INSTALLER
	J 29016 FRONT HUB OUTER BEARING INSTALLER
	J 29017 FRONT HUB RING AND SEAL INSTALLER
	J 29019 AXLE SHAFT OUTER BEARING INSTALLER
	J 29020-A FRONT HUB NUT WRENCH

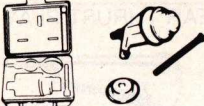



	J 29036 DIFFERENTIAL SIDE BEARING INSTALLER
	J 29038 PINION BEARING INSTALLER
	J 29039 FRONT PINION BEARING CUP INSTALLER
	J 29757 INNER KNUCKLE OIL SEAL INSTALLER (Series 11 only)
	J 29758 INNER KNUCKLE DUST SHIELD INSTALLER (Series 11 only)


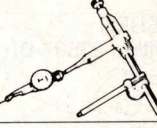
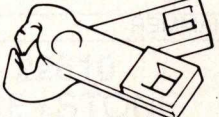
FRONT AXLE & DIFFERENTIAL - T TRUCK

	J 21551 OUTPUT SHAFT BEARING REMOVER
	J 29763 DIAL INDICATOR
	J 33782 PINION OIL SEAL INSTALLER
	J 33785 PINION BEARING INSTALLER
	J 33788 OUTPUT SHAFT BEARING INSTALLER

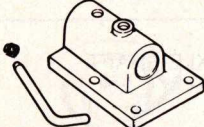




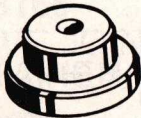

	J 33790 DIFFERENTIAL SIDE BEARING INSTALLER
	J 33791 CARRIER BUSHING REMOVER AND INSTALLER
	J 33792 SIDE BEARING ADJUSTER WRENCH
	J 33798 HUB ENGAGEMENT TOOL
	J 33799 AXLE LOCK CABLE SEAL INSTALLER

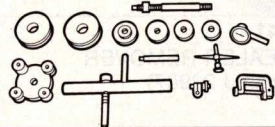

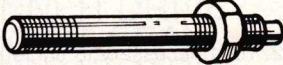
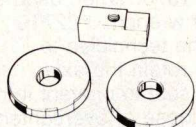
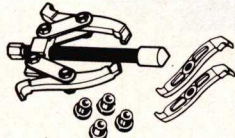
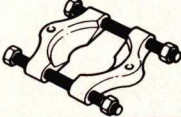

FRONT AXLE & DIFFERENTIAL - T TRUCK (CONTINUED)

	J 33838 PINION SHIM SETTING GAUGE (Use with J 29763)
	J 33842 OUTPUT SHAFT PILOT BEARING INSTALLER
	J 33844 AXLE TUBE BEARING INSTALLER
	J 33893 OUTPUT SHAFT SEAL INSTALLER

	J 34011 OUTPUT SHAFT PILOT BEARING REMOVER
	J 34047 GEAR LASH GAUGE (Use with J 8001-1 & J 25025-1)
	J 35910 DRIVE AXLE SEAL CLAMP PLIERS (Thermoplastic seal)

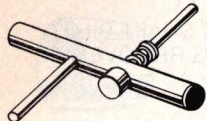


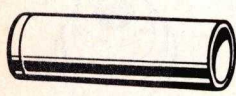


FRONT AND REAR DIFFERENTIAL - TRACKER

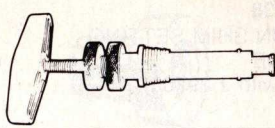
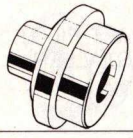
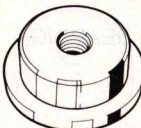
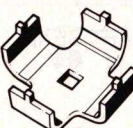
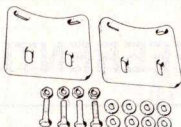
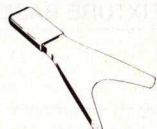
	J 3289-20 HOLDING FIXTURE BASE
	J 3289-21 DIFFERENTIAL HOLDING FIXTURE
	J 6133-01 PINION BEARING INSTALLER
	J 8001 DIAL INDICATOR SET
	J 8092 DRIVER HANDLE
	J 8107-4 DIFFERENTIAL SIDE BEARING REMOVER PLUG
	J 8614-01 FLANGE HOLDER

	J 21777-B PINION SETTING GAUGE KIT
	J 21777-42 PILOT WASHER (Included with J 21777-B)
	J 21777-43 STUD ASSEMBLY (Included with J 21777-B)
	J 21777-89 PINION SETTING GAUGE KIT (Use with J 21777-B) Includes: (2) J 21777-101 Side Bearing Discs (1) J 21777-102 Gauge Plate
	J 22888-D SIDE BEARING REMOVER
	J 22912-01 REAR BEARING REMOVER
	J 23597-B PINION SETTING GAUGE KIT (Featured on page 66)

DRIVE AXLE

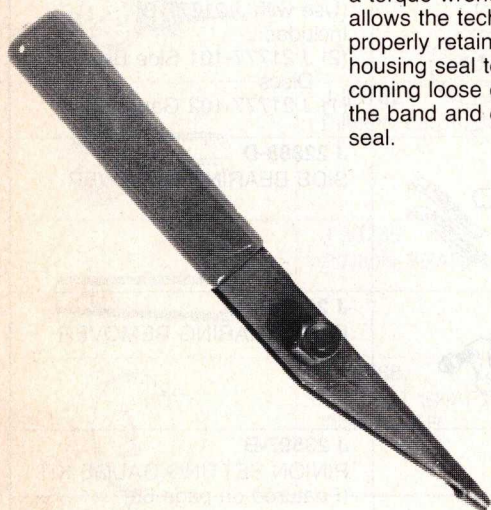
FRONT AND REAR DIFFERENTIAL - TRACKER (CONTINUED)

	J 23597-1 ARBOR (Included with J 23597-B)
	J 23597-12 PILOT WASHER (Included with J 23597-B)
	J 23907 SLIDE HAMMER
	J 24433 SIDE BEARING INSTALLER
	J 25273 PINION SEAL INSTALLER
	J 26941 OIL SEALER REMOVER (Use with J 23907)

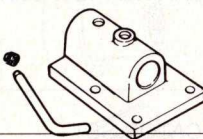


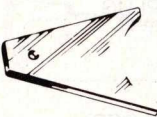
	J 35138 SIDE GEAR THRUST PLAY TOOL
	J 37758 PINION OUTER RACE INSTALLER
	J 37759 PINION OUTER BEARING RACE INSTALLER
	J 37760 SPANNER WRENCH
	J 37769 DIFFERENTIAL HOLDING FIXTURE ADAPTERS
	J 37780 DRIVE AXLE SHAFT REMOVER

FRONT DRIVE AXLES - FRONT AXLE & DIFFERENTIAL - 1979 TO 85 E & K CAR





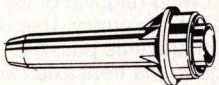

J 22716 CLAMP TIGHTENING WRENCH

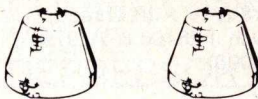
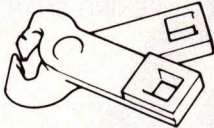


J 22716 is necessary to tighten the Band-it type seal clamps on the GM "E" Car front axles through 1978. When used with a torque wrench, J 22716 allows the technician to properly retain the axle housing seal to prevent it from coming loose or overtightening the band and damaging the seal.

	J 3289-20 BASE HOLDING FIXTURE (Use with J 23320-A)
	J 23320-A FINAL DRIVE UNIT HOLDING FIXTURE (Use with J 3289-20)
	J 25299 SIDE BEARING INSTALLER
	J 25588 SIDE BEARING SHIM INSTALLER

FRONT DRIVE AXLES - FRONT AXLE & DIFFERENTIAL - 1979 TO 85 E & K CAR (CONTINUED)

	J 28512 INNER PINION BEARING CUP REMOVER
	J 28513 PINION SHAFT SPLINE ADAPTER
	J 28514 PINION NUT WRENCH
	J 28515 PINION SEAL PROTECTOR
	J 28516 PINION SEAL INSTALLER
	J 28518 OUTPUT SHAFT SEAL INSTALLER

	J 28712 AXLE SHAFT SEAL PROTECTORS (Includes 2)
	J 35910 DRIVE AXLE SEAL CLAMP PLIERS (Thermoplastic seal)

J 22610
KEYSTONE
CLAMP PLIERS

Required to install the eared band clamp which is used to retain rubber and silicone drive axle seals.



DRIVE AXLE - TRANSAXLE APPLICATIONS

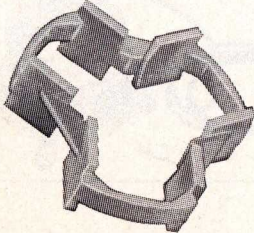
J 33162
DRIVE JOINT
SEAL
PROTECTOR

For vehicles that utilize tripod style inner drive joints. J 33162 is required to protect the seal on these drive joints during servicing of the axle or nearby components.



J 33165
DRIVE JOINT
RETAINER

For vehicles which have a tripod style inner drive joint. J 33165 is designed to hold the tripod assembly together during servicing of the drive axle or joint drive.



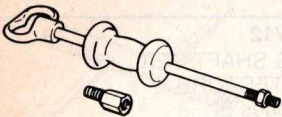
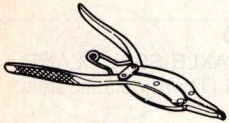
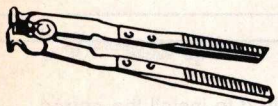

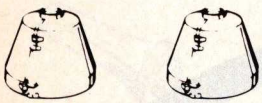

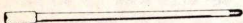
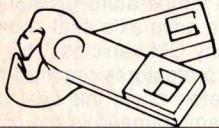
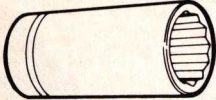
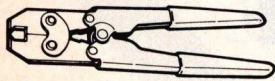
J 34754
INNER DRIVE
JOINT SEAL
PROTECTOR

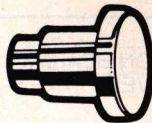

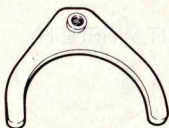
A high temperature-resistant silicone drive axle seal is used on many GM vehicles. This larger protector is required to completely cover this seal to avoid any damage to the seal during service procedures.



DRIVE AXLE

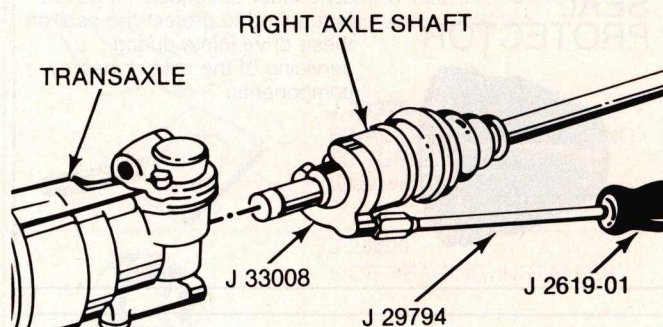
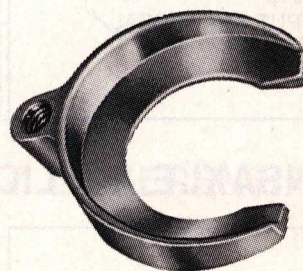
DRIVE AXLE - TRANSAXLE APPLICATIONS (CONTINUED)

	J 2619-01 SLIDE HAMMER ($\frac{5}{8}$ " - 18 & $\frac{1}{2}$ " - 13 Thread) (Use with J 28468 & J 29794 or J 33008)
	J 8059 PARALLEL OPENING SNAP RING PLIERS
	J 22610 KEYSTONE CLAMP PLIERS Earred clamp - Rubber & silicone seal
	J 28468 AXLE SHAFT REMOVER A, J & X-Car without tripot (Use with J 2619-01 & J 29794)
	J 28712 AXLE SHAFT SEAL PROTECTORS 2 Included (Double offset drive joint) "S" Truck 4x4
	J 28733-A FRONT HUB SPINDLE REMOVER "T" Truck 4x4
	J 29794 AXLE SHAFT REMOVAL EXTENSION (Use with J 33008 or J 28468 with J 2619-01 as shown below)
	J 35910 DRIVE AXLE SEAL CLAMP PLIERS (Thermoplastic seal)
	J 34826 36MM HUB NUT SOCKET ($\frac{1}{2}$ " Drive)
	J 35566 DRIVE AXLE SEAL CLAMP PLIERS (Earless clamp- Rubber & silicone seal)

	J 36379 INTERMEDIATE SHAFT BEARING INSTALLER 1987-Current J, L, & W-Cars
	J 37276 AXLE SHAFT REMOVER Nova 4 speed automatic (Use with J 23907)
	J 35762 AXLE SHAFT PULLER ($\frac{3}{8}$ " - 16 Thread)

J 33008 AXLE SHAFT REMOVER

J 33008 is used with the J 2619-01 Slide Hammer to dislodge the internal retaining ring allowing removal of the drive shaft assembly. Use of J 33008 prevents possible damage to the transaxle case which may occur if an attempt is made to pry the axle shaft out.



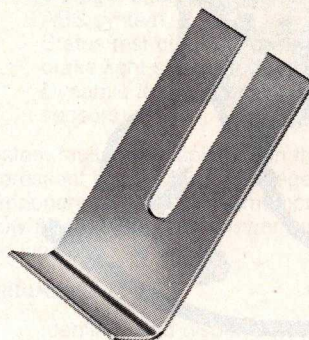
BRAKE BLEEDING, MASTER CYLINDER & GENERAL

J 28662 BRAKE PEDAL EFFORT GAUGE



This precision instrument enables the technician to accurately measure brake pedal effort when diagnosing brake travel and other related problems. In addition, J 28662 is designed to mount easily on the parking brake pedal for adjustment of the parking brake. This instrument features an adjustable pedal clamp to mount on any standard GM service or parking brake pedal and an indicating hand which records the maximum pressure obtained during the test.

J 23709 COMBINATION VALVE DEPRESSOR



Vehicles equipped with front disc and rear drum brakes utilize a combination valve which controls brake system line pressure distribution. To pressure bleed this system, it is necessary to hold the valve stem open on the combination valve with J 23709, permitting flow to the front wheels. J 23709 is designed to fit on most General Motors passenger cars and light duty trucks.

J 23518-01 TANDEM BRAKE BLEEDER ADAPTER



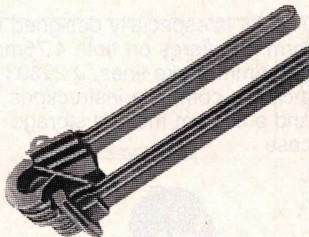
Bleeding the brake system may be made considerably easier by using the J 23518-01 adapter along with a diaphragm type pressure bleeder (such as J 29532). The J 23518-01 enables the brakes to be bled with one hook-up. During the operation, it seals the brake system from atmosphere. J 23518-01 is designed to fit on any General Motors Passenger car or light duty truck with a steel reservoir dual master cylinder.

J 29532 DIAPHRAGM TYPE BRAKE BLEEDER (Universal)

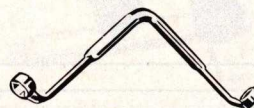


Complete with bleeder hose assembly and male quick coupler connectors. J 29532 features a 2½ gallon capacity, tool tray and complete operating instructions.

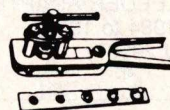
J 25310 UNIVERSAL TUBE BENDER 3/16", 1/4", 5/16" and 3/8" Tubing



It's possible to bend the four most commonly used tubes, 3/16", 1/4", 5/16", and 3/8" O.D. on one tool. Makes smooth short radius bends up to 180°. Calibrated to show angle of bend. Bender is the open side type which allows the bender to slip over the tube at any point.



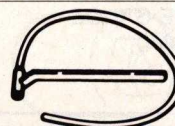
J 21472 BRAKE BLEEDER WRENCH (5/16" & 3/8")



J 23530 BRAKE LINE FLARING TOOL (45° Single & Double Flare)



J 23770 DISC BRAKE COMBINATION VALVE METERING VALVE PIN DEPRESSOR

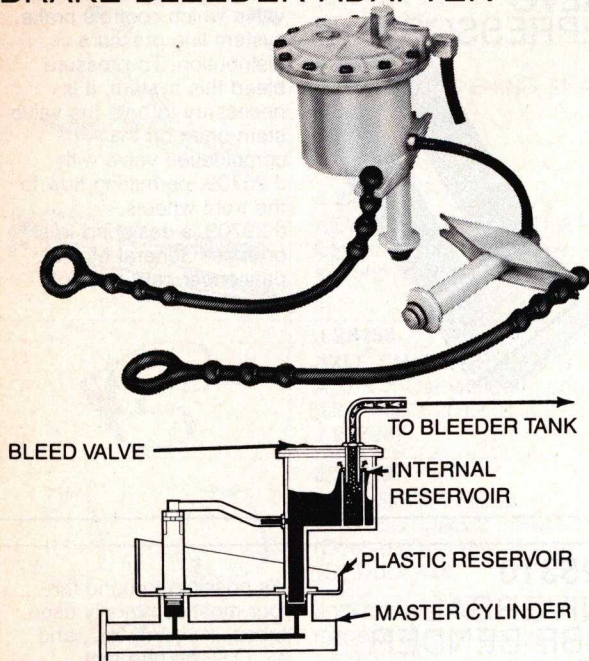


J 28434 WHEEL CYLINDER BLEEDER WRENCH 5/16" (Universal)

BRAKES

BRAKE BLEEDING, MASTER CYLINDER & GENERAL (CONTINUED)

J 29567 UNIVERSAL BRAKE BLEEDER ADAPTER



*All but threaded caps

The most versatile adapter ever offered by Kent-Moore. The J 29567 will fit any General Motors vehicle* with the plastic reservoir type master cylinder. Adjustable legs, rubber hold down straps, convenient storage tray and a uniquely designed reservoir insure quick hook-up and trouble free bleeding.

U.S. Pat. 4,201,056

J 34098 Adapters (Not Included) 1984/85 Corvette

J 35360 Adapters (Not Included) 1985 Powermaster

J 35938 Adapters (Not Included) 1986 & Later B & G Cars.

(Used with J 35360)

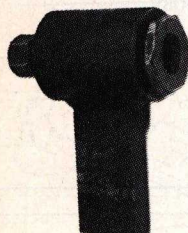
Operation

Typical pressure bleeding equipment may produce brake fluid with air bubbles if it is rolled across a shop or agitated in some other manner. This exclusive Kent-Moore Universal Brake Bleeder Adapter eliminates the possibility of this aerated brake fluid entering the vehicles brake hydraulic system by means of a small internally molded reservoir. As the brake fluid enters this reservoir, air bubbles are released when the fluid flows over the top edge as shown in the diagram.

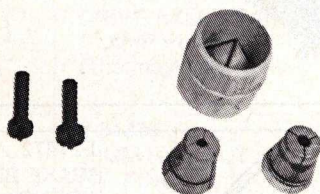
Features

- Easy to connect stretchable retaining cables
- Independent legs will fit any General Motors plastic reservoir master cylinder
- Internal check valves hold fluid in unit and keep out contaminants when not in use
- Includes storage tray
- Complete operational instructions
- Durable nylon molded construction

J 29803-A ISO FLARING KIT



This kit is especially designed to form ISO flares on both 4.75mm and 6mm brake lines. J 29803-A includes complete instructions and a custom molded storage case

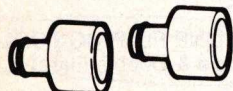


J 35589 COMPACT BRAKE BLEEDER ADAPTER

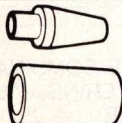


This tool is substituted in place of the reservoir cap when bleeding a brake system equipped with a Delco compact master cylinder.

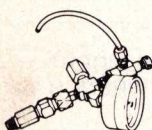
J 35589 is made of cast steel along with a brake fluid resistant o-ring for proper sealing. For use on all 1987 and later A, J, L, and N-Bodies.



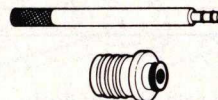
J 34098
BRAKE BLEEDER ADAPTERS
(Corvette 1984 to 1985)
(Use with J 29567)



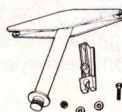
J 34121
BRAKE FLUID RESERVOIR
INSTALLER
(Corvette 1984 to Current)



J 35126
PRESSURE GAUGE
(Powermaster)



J 35360
BRAKE BLEEDER ADAPTERS
(Powermaster)
(Use with J 29567)



J 35938
PRESSURE BRAKE BLEEDER
ADAPTER
1986 & later B & G Cars.
(Used with J 35360)

J 35592 PINOUT BOX



This Pinout Box plugs into the controller harness and is used with a Digital Volt Ohmmeter such as J 34029-A to diagnose the Teves and Bosch brake systems.

BRAKE BLEEDING, MASTER CYLINDER & GENERAL (CONTINUED)

J 35890 ANTI-LOCK BRAKE SYSTEM TESTER



The J 35890 ABS Tester is a microprocessor-based diagnostic tool for the Bosch ABS anti-lock braking system used on the 1986 to current Corvette. The tester is simply connected to the ABS control module harness and will completely perform the following tests:

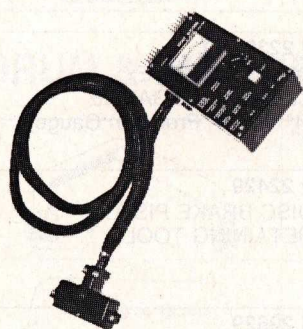
- Voltage, continuity, resistance and ground checks of the ABS system
- Status test of lateral acceleration switch, ignition switch, brake light switch and anti-lock light
- Dynamic test of pump, two stage valves and speed sensors

System faults are displayed on the 16-character vacuum fluorescent display by a message indicating which circuit or component to check. Two membrane switches are provided to allow the technician to answer messages, select the test modes and wheels to be tested.

Features:

- Identifies and displays twenty fault messages
- Tester is powered through vehicle harness
- Includes 6' harness connector
- Complete comprehensive instructions and diagnostic information

J 36210 ANTI-LOCK BRAKE SYSTEM TESTER

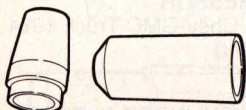


The J 36210 ABS Tester is a hand-held diagnostic tool for the Bosch III anti-lock brake system used on the Cadillac Allante. The tester is simply connected to the ABS Electronic Brake Control Module Harness and will perform the following tests.

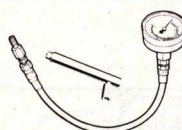
- Wheel speed sensor signal test.
- Valve actuation test.
- Hydraulic unit plausibility switch test.
- Hydraulic replenishing valve test.

Features:

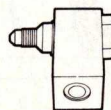
- Carrying/storage case.
- Tester is powered through vehicle harness.
- Includes removable 6 ft harness.



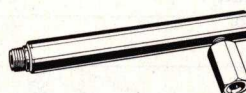
J 35588
REAR CALIPER PISTON
LOCATOR RING INSTALLER
(1986 to current E & K cars)



J 35604-B
BRAKE SYSTEM PRESSURE
GAUGE
Teves Brake System



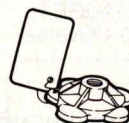
J 35604-25
BRAKE SYSTEM PRESSURE
GAUGE ADAPTER (Use with
J 35604-B) Bosch III System



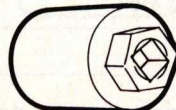
J 35604-88
TEVES ABS PRESSURE
GAUGE ADAPTER



J 35690
PRESSURE BRAKE BLEEDER
ADAPTER
Bosch II System



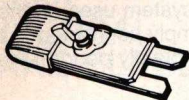
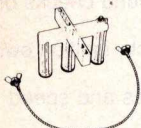
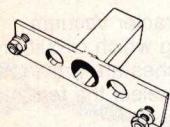
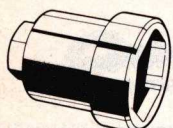

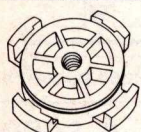
J 35798
PRESSURE BRAKE BLEEDER
ADAPTER
Teves Brake System

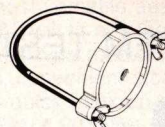


J 35804-A
PRESSURE SWITCH SOCKET
Teves Brake System

BRAKES

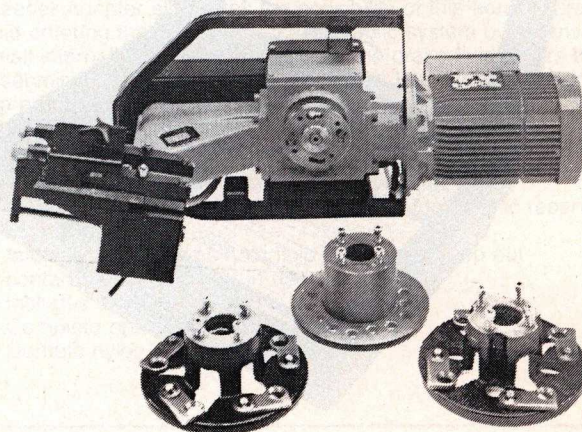
BRAKE BLEEDING, MASTER CYLINDER & GENERAL (CONTINUED)

	J 35856 PROPORTIONING VALVE DEPRESSOR F-Car, 1990 B-Car, M-Van 4WAL
	J 37115 BRAKE PRESSURE BLEEDER ADAPTER (W-Car, Powermaster III)
	J 37116 ABS PM III HOLDING FIXTURE (W-Car, Powermaster III)
	J 37117 PRESSURE SWITCH SOCKET (W-Car, Powermaster III)
	J 37118 BRAKE SYSTEM PRESSURE TESTER (W-Car, Powermaster III)
	J 37762 BRAKE BLEEDER ADAPTER (Geo Tracker)


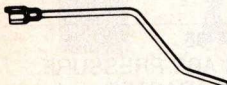
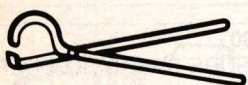

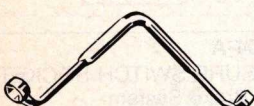

	J 38340 PRESSURE BLEEDER ADAPTER (Geo Prizm)
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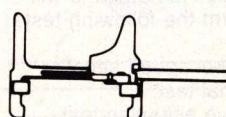
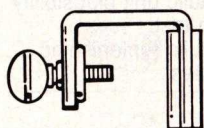


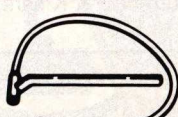
J 37704 ON DISC BRAKE LATHE

The J 37704 Disc Brake Lathe can cut all four rotors on or off the vehicle with 0° runout. Minimizes system lateral runout and thickness variation which result in brake pulsation.

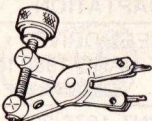
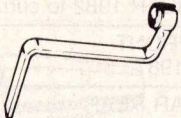



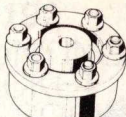
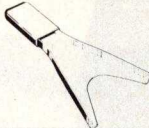
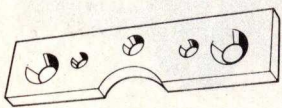
DRUM & DISC BRAKES

	J 7624 SPANNER WRENCH (Universal)
	J 8049 SPRING REMOVER & INSTALLER Universal
	J 8057 BRAKE SPRING PLIERS Universal
	J 21177-A DRUM TO BRAKE SHOE CLEARANCE GAUGE (4 1/2" to 12 7/8") Universal
	J 21472 BRAKE BLEEDER WRENCH 5/16" and 3/8" Hex
	J 21938 BRAKE PISTON RETAINER Delco-Moraine Corvette 1965-82

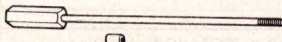
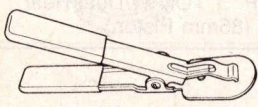
	J 22348-01 DRUM BRAKE SPRING REMOVER & INSTALLER (3/4 & 1 Ton Truck)
	J 22364-01 DRUM TO SHOE CLEARANCE GAUGE (4" TO 20" Precision Gauge)
	J 22429 DISC BRAKE PISTON RETAINING TOOL
	J 22629 DISC BRAKE PISTON RING COMPRESSOR (Delco-Moraine 1-7/8" Corvette 1967-82)
	J 24548 DISC BRAKE PISTON RING COMPRESSOR (Bendix Chev-GMC Truck 1974 to Current)
	J 28434 WHEEL CYLINDER BLEEDER WRENCH (5/16" Universal)

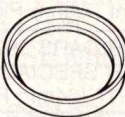
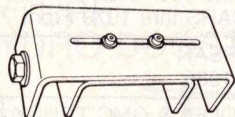
DRUM & DISC BRAKES (CONTINUED)

	J 29839 BRAKE CYLINDER RETAINER REMOVER
	J 34065 PARKING BRAKE CABLE RETAINER COMPRESSOR (Fiero 1984 to Current)
	J 34866 BRAKE DRUM REMOVER (Chevrolet Sprint & Spectrum - use with J 2619-01 Slide Hammer)


	J 37620 BRAKE ROTOR ADAPTER (K-10 & 20 Series Truck)
	J 37780 REAR BRAKE DRUM REMOVER
	J 37781 BRAKE DRUM REMOVER (Geo Tracker) (Use with J 2614-01)

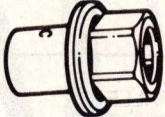
DRUM & DISC BRAKES - P CAR

	J 36620 CALIPER HOUSING SPRING PIN REMOVER
	J 36621 PISTON ROTATOR

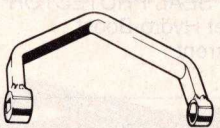
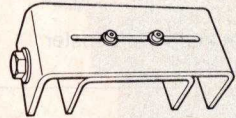
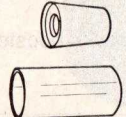
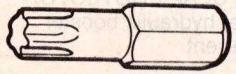
	J 36622 DUST BOOT SEAL INSTALLER (Use with J 36623)
	J 36623 PISTON INSTALLER

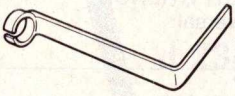
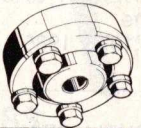
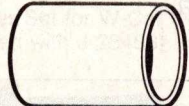
DRUM & DISC BRAKES - NOVA

	J 37149 BRAKE PISTON DRIVER
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	J 37150 ADJUSTING BOLT GUIDE NUT
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DRUM & DISC BRAKES - W CAR

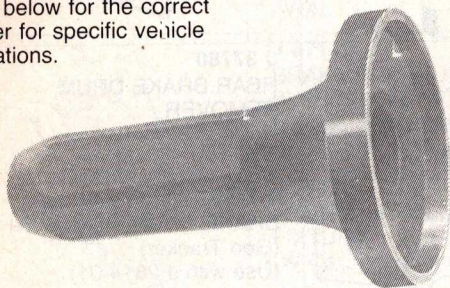
	J 36581 REAR CALIPER BOLT TORQUE WRENCH ADAPTER
	J 36623 PISTON INSTALLER
	J 36627-A CALIPER PISTON LOCATOR
	J 36721 FRONT CALIPER BRACKET TORX BIT (#60)

	J 37043 PARKING BRAKE CABLE RELEASE TOOL
	J 37160-A BRAKE ROTOR MOUNTING ADAPTER (Required for rotor refinishing)
	J 37160-50 ADAPTER SLEEVE Adapts J 37160-A to 7/8" arbor.

BRAKES

DUST BOOT SEAL INSTALLERS

These special tools are designed to install the dust boots into the caliper. See the charts below for the correct installer for specific vehicle applications.



TOOL NO.	ADAPTATION
J 22628	DELCO-MORAINE (1-7/8") Corvette 1967-82
J 22904	GM FRONT 1969 to current (74mm Piston)
J 26267	M-VANS A & E CARS 1978-81 FRONT H-CAR SPECIAL 1976-80 FRONT (64mm Piston)
J 26296-A	F CAR thru 1981 rear B & C CARS thru 1979 Front
J 28678	E CAR REAR 1979 to 1985
J 28735-A	CHEVROLET & GMC TRUCK 1979 to current (80mm Piston)

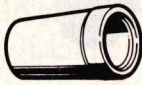
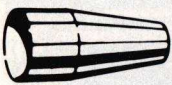
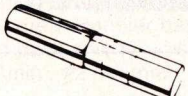
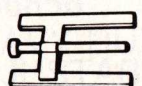

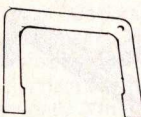
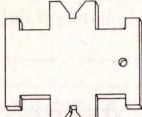
TOOL NO.	ADAPTATION
J 29077-A	FRONT WHEEL DRIVE A, J, L, N, X CARS 1980 to current
J 29381	T-CAR FRONT 1976-82 F-CAR REAR 1982 to current
J 34009	T-CAR FRONT 1983 to 1987
J 35587	E & K CAR REAR 1986 to current
J 35777	E & K CAR FRONT 1986 to current
J 36349	W-CAR FRONT
J 36350	W-CAR REAR
J 36473	C/K-10 (64mm Piston) 1988
J 36474	C/K 1/2 TON (75mm Piston) 1988
J 36475	C/K-30 1 TON (80mm Piston) 1988
J 38453	GMC "P" 1 TON W/Dual Rear wheels (86mm Piston)

BRAKE BOOSTER

	J 6217 SEAT INSTALLER
	J 9504-B VACUUM BOOSTER SPANNER WRENCH GM Universal
	J 22647 PUSH ROD HEIGHT GAUGE Delco-Moraine .1875/.1855-.1975/.1985
	J 22677 BOOSTER SHELL SEAL INSTALLER Bendix
	J 22733 BOOSTER DIAPHRAGM SEAL PROTECTOR Bendix, dual diaphragm

	J 22805-01 BOOSTER HOLDER GM Universal
	J 24551-A PISTON SEAL PROTECTOR Chevrolet Hydro-Boost 1974-current
	J 24553 INPUT ROD SEAL PROTECTOR Chevrolet hydraulic booster 1974-current
	J 24569 HYDRA-BOOST ROD REMOVER Chevrolet hydraulic booster 1977-current
	J 25083 PISTON SEAL PROTECTOR Chevrolet hydraulic booster 1977-Current

BRAKE BOOSTER (CONTINUED)

	J 28458 POWER PISTON SEAL PROTECTOR & DIAPHRAGM RETAINER INSTALLER All Delco with one piece power piston (Hydro-Boost)
	J 28497 INPUT ROD SEAL PROTECTOR Chevrolet hydraulic booster 1978-current
	J 29282-A AIR VALVE PUSH ROD RETAINER INSTALLER A, J, N, L & X Cars
	J 34873-A BOOSTER PISTON ROD GAUGE Chevrolet Sprint, Spectrum & Nova
	J 34874 BOOSTER SEAL REMOVER & INSTALLER (Use with J 7079-2) Chevrolet Sprint & Nova
	J 35498 BOOSTER ASSEMBLY GAUGE Corvette plastic booster 1985
	J 37839 PUSH ROD HEIGHT GAUGE GM Universal

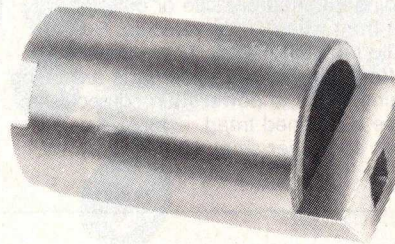
J 26889 ACCUMULATOR PISTON COMPRESSOR

Certain General Motors hydraulic brake boosters utilize a gas-filled accumulator. J 26889 is used with tool J 2269-01 or a large "C" clamp to remove this accumulator. (Hydro-Boost)



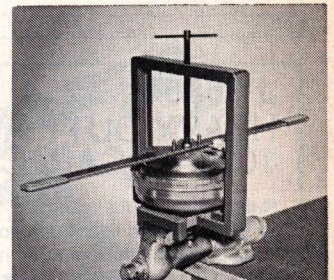
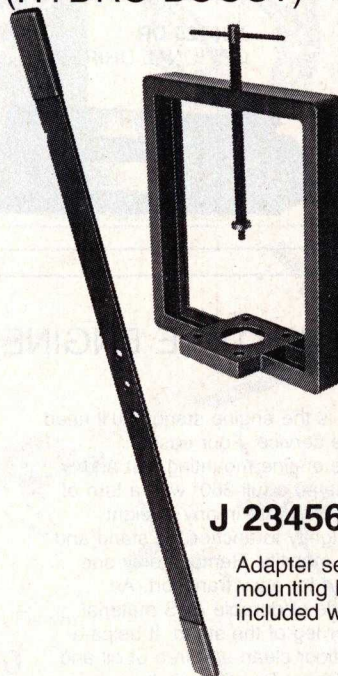
J 29192 MOUNTING BRACKET NUT SOCKET

This tool is specifically designed to install and torque the mounting bracket nut on all General Motors hydraulic boosters.



J 23456 POWER BRAKE BOOSTER DISASSEMBLY AND REASSEMBLY FIXTURE (HYDRO-BOOST)

J 23456 has been developed to enable the technician to efficiently disengage the two halves of the booster. J 23456 retains both halves as the center screw is backed off and the internal booster spring is allowed to return to its free height. To assemble, just reverse the same procedure. This tool will separate most GM Power Brake Vacuum Boosters as is and with the adapters listed below, it will separate boosters with mounting brackets attached.



J 23456-20

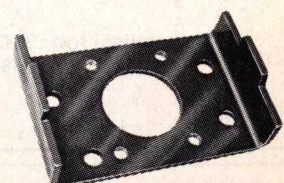
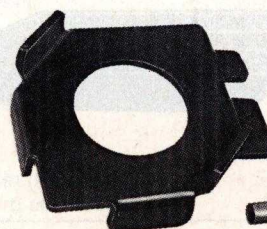
Adapter set for angled mounting brackets. (Not included with J 23456)

J 35883

Adapter Set for W-Car (Not Included with J 23456)

J 23456-51A

Adapter for Bendix 1974-75 dual diaphragm power brake booster, Chevrolet Sprint and 1985 Corvette. (Not included with J 23456)

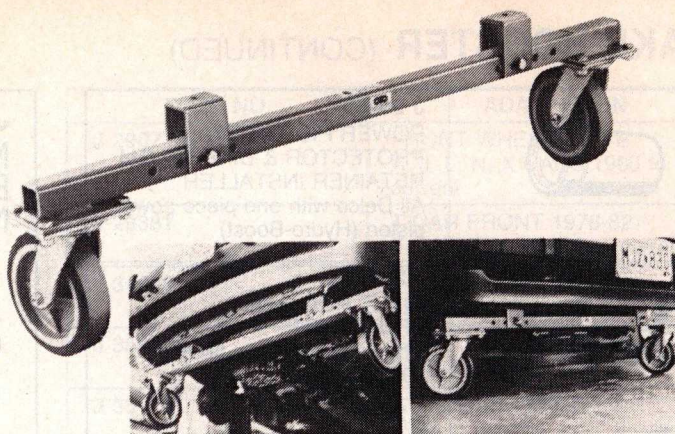


GAS ENGINE - MECHANICAL

HOLDING & LIFTING

J 36855 FRONT WHEEL DRIVE CAR DOLLY

For use on all GM series A, C, H, J, N, P and X model front wheel drive vehicles. This lightweight, sturdy car dolly is a must tool for any shop doing engine/transaxle or collision repair work on GM series front wheel drive vehicles. Readily attaches to vehicle's cradle mounting holes. Once attached, vehicle can be removed from service bay while parts are being ordered or repairs are being made to power train components. Dolly's swivel casters have cushioned tread — moves easily over floor grates, air hoses and other small objects.



J 36125 ENGINE STAND - 800 LB CAPACITY

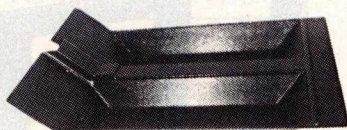
For the professional • Breakdown construction • Easily adjustable to fit all American & most foreign cars • Conforms with various codes requiring 4 wheel design • Includes all necessary hardware for domestic engines.

Flywheel removal is not necessary prior to mounting • Head can be locked at eight common work positions with a through pin • No troublesome "T" type lock • Base extra long and wide for added stability • Heavy casters with locks. Turning bar is standard • Base and mast of 11 gauge 3" x 2" rectangular tubing • Hardened bolts (Grade 5 or stronger) used throughout.

Specifications

Capacity	800 lbs
Length	42"
Width	42"
Height	39"
Weight	69 lbs

J 36125-DP OPTIONAL DRIP PAN



J 36854 HEAVY DUTY AUTOMOTIVE ENGINE STAND 1000 LB CAPACITY

Rated at 1,000 lbs. capacity, this is the engine stand you'll need for your car and light truck engine service. Four easily adjustable attachment arms make engine mounting fast and easy. Then the engine can be rotated a full 360° with a turn of the handle. A locking pin secures the work in any of eight positions. Both rear wheels lock tightly to anchor the stand and front swivel casters provide great mobility. Remove only one bolt and the stand is disassembled for easy transport. An optional drip pan is available. Made of durable ABS material, the pan fits snugly over the center leg of the stand. It helps a great deal by keeping your shop floor clean and free of oil and engine fluids that seem to drop forever from a partially disassembled engine.

J 36859 OPTIONAL DRIP PAN



HOLDING & LIFTING (CONTINUED)

J 36295 ENGINE/TRANSAXLE FRAME HANDLER

Eases removal and replacement of engine/transaxle frame assemblies of General Motors front wheel drive vehicles. Also services Pontiac Fiero. Equipped with four swivel caster (two of which can be locked) and a hydraulic jack, the handle is wheeled under the chassis of a car on a hoist. Two furnished wooden blocks on its mounting plate are positioned beneath the assembly under the axle and tightened in place. The plate is then jacked up and tilted by means of the adjustable screws to insure a proper fit. Finally, the chassis is raised, the restraining strap tightened, and the unit rolled away to a service area. Handler has a 2,000 lb capacity; table tilts 22° front to back and 17½° side to side. Height, floor to table; 19-¼" min., 22-¾" max.



J 36856 HEAVY DUTY ADJUSTABLE LIFTING SLING — 2000 LB. CAPACITY ¼" CHAIN 56" LONG



For lifting or positioning engines, transmissions or other components. The plate design enables the chains to be "short hooked" and adjusted for proper tilt. Each chain can be adjusted for length independently. When used with a crane or hoist, lifting in a confined area poses fewer problems because the chains can be as short as needed.

J 36857 LIFTING BRACKETS — 4000 LB. CAPACITY

These brackets attach directly to the components for easy lifting. The large chain link easily attaches to the lifting chain.



J 36858 LIFTING CHAIN

¼" steel chain 56-½" long 2000 lb. capacity with swiveling hooks on both ends.



J 28467-A UNIVERSAL SUPPORT FIXTURE

Used for service procedures requiring engine support on transverse mounted engines. On GM vehicles the support legs attach to the strut tower.

Features Include:

- Universal design
- Support legs attach to any GM strut tower
- Illustrated instruction booklet
- Heavy duty design
- Large wing nuts on lifting hooks for easy hook-up
- Front leg height is adjustable
- Lifting hook brackets can slide to any other position on either bar.

Accessories

The following accessories are used in conjunction with J 28467A Support Fixture.

*J 28467-45

Engine Lifting Hooks (Not Shown)
(Required on A-car with 4.3L diesel engine)

J 28467-50

Specially designed hook needed to support the 3.8 liter engine. (Included with J 28467-A)

*J 28467-60

This special support foot is needed for Pontiac Fiero GT Fastback 1986 to 1988

*J 28467-89

Engine Support Fixture Adapters (Geo Metro)

*J 28467-90

Engine Support Fixture Adapters
(1990 W-Car; use with J 36462 and J 35953)

*J 28467-125

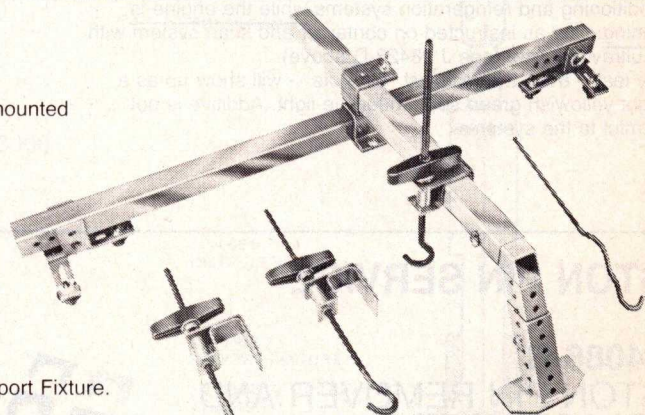
Engine Support Adapters
(Geo Storm)

*J 28467-200

Engine Support Fixture Adapter (U-Van)

*J 35563

Engine Support Bracket (Not Shown)
(Required on 2.8L Fiero application)



*J 35953

Engine support foot modification for L-car & W-car.

J 36462

Engine support adapter leg set
(W-car only)

***NOTE:** Not included with J 28467-A.

GAS ENGINE - MECHANICAL

J 28428-D HIGH INTENSITY BLACK LIGHT

The J 28428-D Leak Detector allows the technician to pinpoint the source of engine, transmission, power steering, air conditioning or cooling system leaks in minutes . . . even in well lighted areas.

Includes:

- 6 (1 oz.) Containers of oil additive.
- Special 5" diameter filter that eliminates visible white light.
- Filter is recessed to prevent breakage.
- Lamp head rotates full 360° and is removable from base with 20 ft. cord for hand use.
- Transformer has 3-wire cord, operates on 115 volts, 60 Hz.
- UL listed.

Service Parts

J 28429	BLACK LIGHT FILTER
J 28430	BLACK LIGHT BULB
J 28431-B	FLUORESCENT OIL ADDITIVE, 24 (1 oz.) Containers
J 28431-6	FLUORESCENT OIL ADDITIVE, 6 (1 oz.) Containers
J 28431-22	FLUORESCENT OIL ADDITIVE, 1 (22 oz.) Bottle
J 29545	FLUORESCENT COOLANT ADDITIVE, 24 (1 oz.) Containers
J 29545-6	FLUORESCENT COOLANT ADDITIVE, 6 (1 oz.) Containers

The oil and coolant additives are not harmful to engines, transmissions, or power steering systems and may remain in the engine or components after use.



FLUORESCENT OIL ADDITIVE

One ounce of oil additive contains enough fluorescent dye for the average engine. Leaking oil from a transmission, crankcase or power steering assembly will fluoresce a brilliant yellow with the J 28428-D High Intensity Black Lamp.

FLUORESCENT COOLANT ADDITIVE

One ounce of Coolant Additive helps pinpoint leaks in radiators, water hoses, heaters, and engine parts such as water pump and freeze plugs. The additive glows a bright green color and is water soluble for ease in clean-up and repeat inspections.

J 36790 AIR CONDITIONING FLUORESCENT LEAK DETECTION ADDITIVE (12 14 OZ. CANS)

A new fluorescent additive that accurately detects leaks in air conditioning and refrigeration systems while the engine is running. Use as instructed on container and scan system with an ultraviolet light (see J 28428-D above).

Any leak - even the smallest "pin-hole" - will show up as a bright yellowish green spot under the light. Additive is not harmful to the systems.

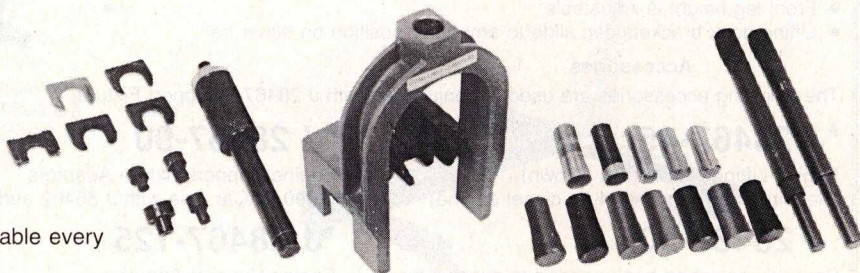


PISTON PIN SERVICE

J 24086-B PISTON PIN REMOVER AND REPLACER SET

TOOL FEATURES:

- Fork of tool supports connecting rod at wrist pin.
- Micrometer adjustable installer with settings available every .010".
- Obsoletes all tools that support piston.
- Removes and installs pin without damage to aluminum pistons.
- No load on piston.
- Guide pins and support fork inserts for different piston pin sizes.
- "Hands-off" design. Tool supports piston and rod assembly and holds the remover or installer arbor in complete alignment.
- Upper guide on tool also acts as a convenient and accurate stop. This obsoletes other tools that use a spring-loaded bottomstop.



- No eyeballing required during piston pin removal. Pin drops free, not into a bottom base. Tool does not have to be tipped over to retrieve piston pin.
- Tool can be used on any press. No access hole in press bed required.

Patent Nos. 4, 118,851 & 4,118, 852

GAS ENGINE - MECHANICAL

PISTON PIN SERVICE (CONTINUED)

GENERAL MOTORS APPLICATION CHART FOR J 24086-B PISTON PIN REMOVER AND REPLACER SET

CYLINDER	ENGINE	MANUFACTURER-DIVISION	FORK INSERT (J 24086-)	PIN REMOVER (J 24086-)	PIN GUIDE (J 24086-)	INSTALLER SETTING (J 24086-9)
L-3	1.0L	Suzuki (Chevrolet Sprint)	160	-88A	-84 Pink	B-8 ²
	1.0L	Suzuki (Chevrolet Metro)	160	-110 ⁵	-84 Pink	E-4 ⁶
L-4	1.5 L	Isuzu (Chevrolet Spectrum)	160	-88A	-82A Yellow	B-9 ²
	1.6 L SOHC	Isuzu (Chevrolet Storm)	166	-110 ^{5,6}	-82A Yellow	F-2 ⁶
	1.6 L DOHC	Isuzu (Chevrolet Storm)	166	-110 ^{5,7}	-82A Yellow	E-7 ⁷
	1.6 L	Suzuki (Chevrolet Tracker)	104	-88A	-93 Silver	E-6 ³
	1.6 L	Chevrolet (Chevette/T1000)	281	-8A	-6A Gold	I-5
	1.6 L	Toyota (Chevrolet Nova)	160	-88A	-82A Yellow	C-6 ²
	1.6 L	Toyota (Chevrolet Prizm)	160	-88A	-82A Yellow	C-9 ²
	1.6 L	Daewoo (Pontiac LeMans)	160	-88A	-82A Yellow	D-4 ²
	1.8 L	Pontiac	910	-8A	-6A Gold	I-0
	1.8 L	Isuzu (Chevrolet LUV)	281	-8A	-5A Blue	I-5
	2.0 L (through 1986)	Chevrolet	104	-88A	-87A Brown	B-4 ²
	2.0 L (1987 SOP on)	Chevrolet	104	-88A ⁴	-87A Brown	E-5 ³
	2.0 L OHC	Pontiac	905	-88A	-92A Orange	K-5
	2.2 L	Chevrolet	220	-88A	-87A Brown	E-5 ³
	2.5 L	Pontiac	905*	-8A	-7A Violet	F-8
V-6	2.8 L (through 1987)	Chevrolet	281	-88A ¹	-6A Gold	I-1 ¹
	2.8 L (1988 SOP on)					
	w/25.5 mm wide rod	Chevrolet	281*	-88A ¹	-6A Gold	E-1 ¹
	w/21.5 mm wide rod	Chevrolet	281*	-88A ¹	-6A Gold	E-9 ¹
	3.8 L	Chevrolet	905	-8A	-7A Violet	I-6
	3.0/3.8 L	Buick	905	-8A	-1A Black	H-6
	4.3 L	Chevrolet	905	-8A	-7A Violet	G-4
V-8	3300/3800	Buick	905	-8A	-6A Gold	L-1
	4.1 L	Cadillac	281*	-8A ¹	-5A Blue	E-7 ¹
	4.5 L	Cadillac	281*	-88A ¹	-5A Blue	E-7 ¹
	283 C.I.D.	Chevrolet	905	-8A	-7A Violet	G-8
	5.0 L/305 C.I.D.	Chevrolet	905	-8A	-7A Violet	G-8
	5.7 L/350 C.I.D.	Chevrolet	905	-8A	-7A Violet	G-8
	454 C.I.D.	Chevrolet	905	-8A	-3A Gray	G-7

¹ Requires J24086-282 Installation/Removal Adapter

² Requires J24086-83A Installation Adapter

³ Requires J24086-105 Installation Adapter

⁴ Requires J24086-107 Removal Adapter

⁵ Included with J24086-113 Kit

⁶ Requires J24086-111 Installation Adapter (Incl. with J 24086-113 Kit)

⁷ Requires J24086-106 Installation Adapter

* Insert must be inverted.

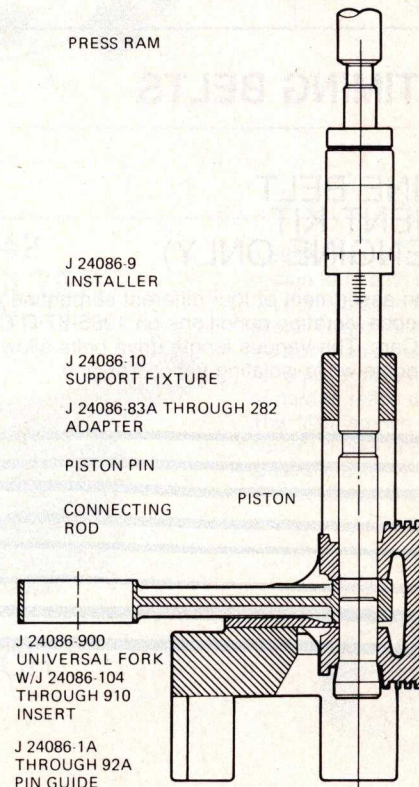
NOTE: J-24086-B includes one of each tool

listed in the above application chart plus

(1) J-24086-10 Universal Support Fixture

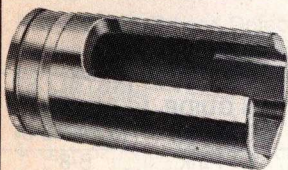
and (1) J-24086-900 Support Fork.

**Exception: J-24086-113, J-24086-166,
J-24086-220 must be ordered separately.**



GAS ENGINE - MECHANICAL

EMISSIONS

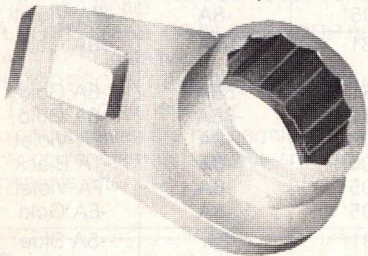


**TVS SWITCH
SOCKET WRENCHES**
(1973 to current)

SIZE	TOOL #
7/8"	J 26435-A
1-1/16"	J 25254-10A
1-1/8"	J 25254-3
1-1/4"	J 25254-11

**J 29533-A
O² SENSOR
SWITCH
WRENCH**

This 7/8" wrench is designed to remove & install the oxygen sensor on all General Motors vehicles. (Uses 1/2" square drive)



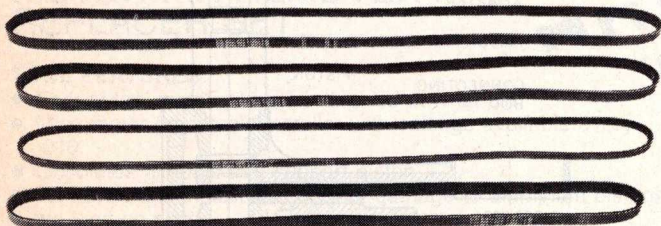


**J 35314
EXHAUST PRESSURE HOSE**
All GM - use with J 29658-A
(Gauge not included)

DRIVE & TIMING BELTS

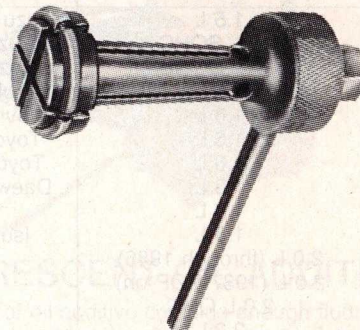
J 36312 SERPENTINE BELT ASSORTMENT KIT (HT-4100 ENGINE ONLY)

This kit includes an assortment of four different serpentine drive belts used to diagnose vibration conditions on 1985-87 C Cars and 1986-87 E/K Cars. The various length drive belts allow operation of the engine while isolating various engine accessories.



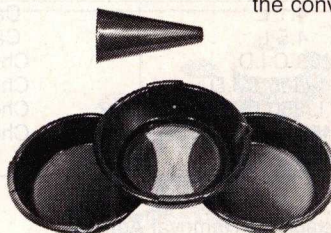
J 34118 CATALYTIC CONVERTER PLUG INSTALLER

This tool gives the technician an easy and quick way to install the production type plugs into the catalytic converters with a positive seal.



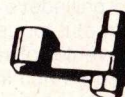
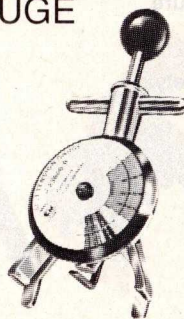
J 34155 CATALYST BEAD EXCHANGE KIT

This kit makes the job of recycling catalyst beads quick and easy with no mess. Included are two pans to store the beads, and a funnel to refill the converter.



J 23600-B UNIVERSAL V-BELT TENSION GAUGE

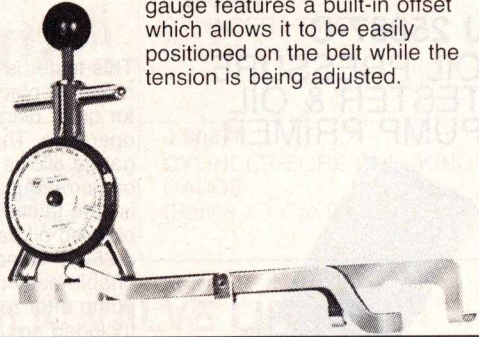
Measures belt tension quickly and accurately to ensure maximum belt and bearing life. The proper belt tension eliminates slippage and increases efficiency of belt-driven components.



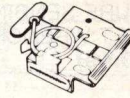
**J 23654
TIMING BELT TENSIONING
ADAPTER**
(L-4 2.3L 1971 thru 77)

DRIVE & TIMING BELTS (CONTINUED)

J 26486-B TIMING BELT TENSION GAUGE

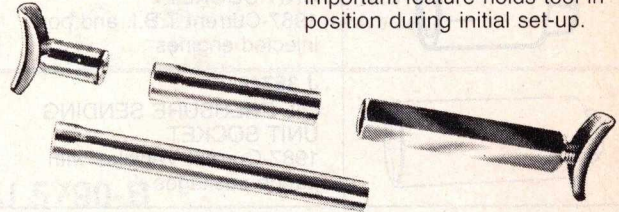


The J 26486-B Timing Belt Tension Gauge assures correct adjustment of timing belt tension on gasoline OHC engines. The gauge features a built-in offset which allows it to be easily positioned on the belt while the tension is being adjusted.



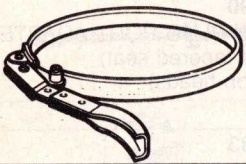
J 29550
V-BELT TENSION GAUGE
(Up to 1/2" width)

J 29661 UNIVERSAL BELT TENSION ADJUSTER

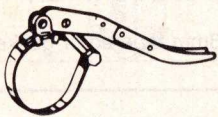


Use J 29661 to maintain correct belt tension during tightening of adjustment bolts. Eliminates need for prybars. J 29661 is spring loaded. This important feature holds tool in position during initial set-up.

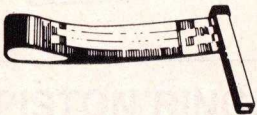
OIL FILTER WRENCHES



J 22700
OIL FILTER WRENCH
(3-7/16" to 3-3/4" dia. range)



J 25225
OIL FILTER WRENCH
(2-13/16" to 3-1/8" dia. range)



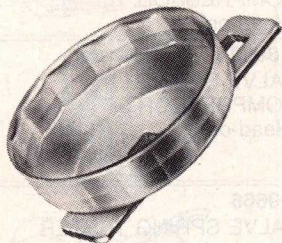
J 29927
OIL FILTER WRENCH NYLON
BELT TYPE
(2" to 6" dia. range)

J 34027 OIL FILTER WRENCH



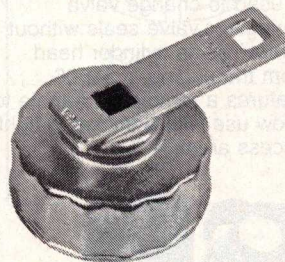
Universal 3" (76mm) 15 flute oil filter wrench fits various flute designs found on AC/Delco, Fram, Wix, STP, NAPA, Sears, Gard, Montgomery Ward, VW, and Motorcraft filters. Use with square drive ratchet or extension — zinc plated.

J 22775 OIL FILTER WRENCH



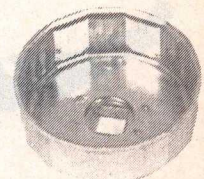
This wrench fits all 1968 to current GM AC large oil filters and incorporates an offset strap with 1/2" square drive for replacement of hard to reach or tight filters.

J 29142 OIL FILTER WRENCH



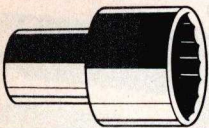
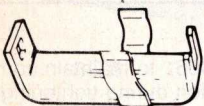
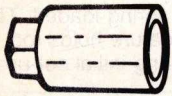
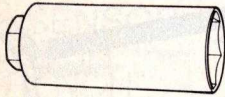
J 29142 has a double step design to fit both scalloped and flat configuration GM model oil filters. This oil filter wrench incorporates an off-set strap with 1/2" square drive for replacement of hard to reach or tight oil filters. This filter wrench fits all 1976 to current model GM engines using small diameter (PF47, PF40, or similar size) AC oil filter.

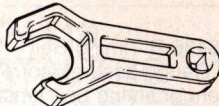
J 37140-A 65MM OIL FILTER WRENCH NOVA/SPECTRUM



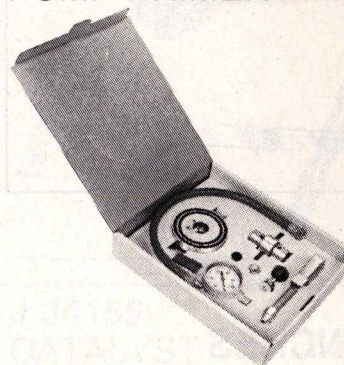
GAS ENGINE - MECHANICAL

OIL PRESSURE SYSTEM

	J 21757-03 OIL PRESSURE SENDING UNIT SOCKET WRENCH (1-1/16", 3/8" Drive)
	J 28687-B OIL PRESSURE SENDING UNIT WRENCH (9/16")
	J 35749 OIL PRESSURE SENDING UNIT SOCKET 1987-Current T.B.I. and port injected engines
	J 35748 OIL PRESSURE SENDING UNIT SOCKET 1987-Current Vehicles with gauge packages

	J 37398 OIL PRESSURE SENDING UNIT WRENCH 1987-current 3.0L N car
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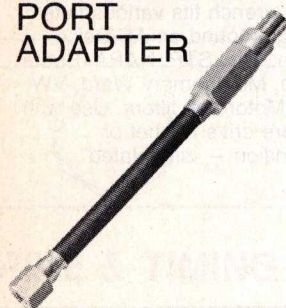
J 25087-C OIL PRESSURE TESTER & OIL PUMP PRIMER




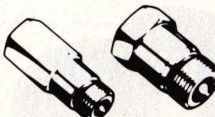
This tester is designed to mount in place of the oil filter for quick diagnosis of oil pump operation. The 0-60 P.S.I. gauge allows measurement of oil pump outlet pressure to isolate faulty components or blocked oil passages. J 25087-C includes adapters to enable easy priming of the oil pump after replacement. Included are J 25087-10 Test Adapter (M 18 x 1.5 metric thread oil filter) J 25087-30 for the 3" GM oil filters (1968 to current). Complete instructions are included.

SPARK PLUG PORT ADAPTERS

J 22794 SPARK PLUG PORT ADAPTER

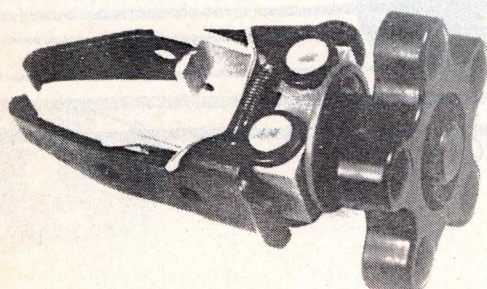


J 22794 is installed into spark plug hole and then connected to an air hose to supply compressed air into the cylinder. This is done to hold valves against their seat so that worn or broken valve springs or valve seals can be serviced without removal of the cylinder head saving you time and money. (For aluminum heads)


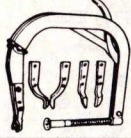
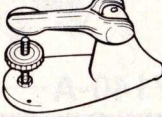
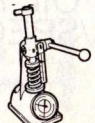
	J 23590 SPARK PLUG PORT ADAPTER (14mm tapered seat) (For iron heads)
	J 29833 SPARK PLUG PORT ADAPTER SET (14 & 18mm tapered or gasket style)

VALVE SPRING SERVICE

J 38606 VALVE SPRING COMPRESSOR

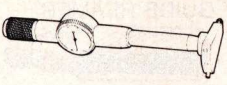

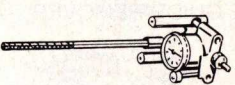


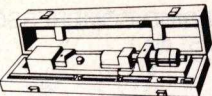

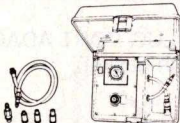
This valve spring compressor is used to change valve springs or valve seals without removing the cylinder head from the engine. J 38606 features a removable handle to allow use with a socket in tight access areas.

	J 5892-C VALVE SPRING COMPRESSOR (Head-on)
	J 8062 VALVE SPRING COMPRESSOR (Head-off)
	J 9666 VALVE SPRING TESTER
	J 22738-02 VALVE SPRING TESTER





GAS ENGINE - MECHANICAL

CYLINDER BORE CHECKING & RECONDITIONING

	J 5347-B DIAL BORE GAUGE 3" to 8" Range (Used with J 23059-01)
	J 5902-01 CYLINDER HONE (2-1/2" to 5-3/4")
	J 8087 CYLINDER BORE CHECKING GAUGE (Range 2-1/2" to 9")

	J 23059-01 DIAL BORE GAUGE SETTING MASTER 3" to 8" range (Used with J 5437-B)
	J 24270 RIDGE REAMER (Range 3" to 5")
	J 35667-A CYLINDER LEAKDOWN TESTER (Universal)

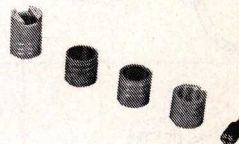
HYDRAULIC VALVE LIFTERS

	J 3049 HYDRAULIC VALVE LIFTER REMOVER
	J 9290-01 HYDRAULIC VALVE LIFTER REMOVER
	J 26400-1B HYDRAULIC VALVE LIFTER TEST OIL 1 Gallon (Used with J 5790-01)
	J 29834 HYDRAULIC VALVE LIFTER REMOVER

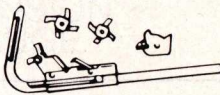
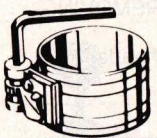
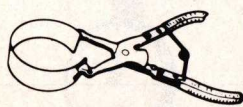
J 5790-B HYDRAULIC VALVE LIFTER LEAKDOWN TESTER



After a valve lifter has been cleaned and inspected, it must be tested for leakdown rate to determine whether it is within limits which assures satisfactory lifter operation. Complete instructions and one gallon Hydraulic Valve Lifter Test Oil are included.



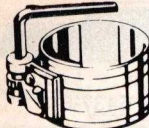
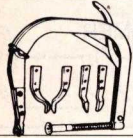
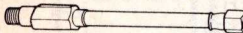
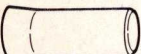
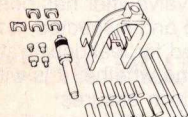

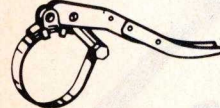

PISTON RINGS


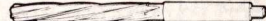
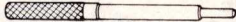
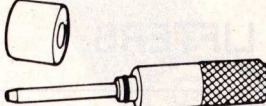
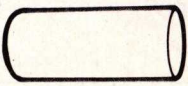
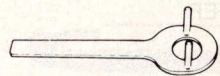
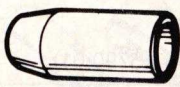
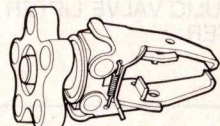
	J 3936-03 PISTON RING GROOVE CLEANER
	J 8037 UNIVERSAL PISTON RING COMPRESSOR (2-1/8" to 5" diameter)
	J 29789 PISTON RING COMPRESSOR 3-3/8" to 3 5/8"

PISTON RING COMPRESSORS (Split Ring Style)	
TOOL #	SIZE
J 5601	3.75"
J 22965	3.8"
J 5569	4"

GAS ENGINE - MECHANICAL

L-3 1.0L CHEVROLET (SPRINT)¹

	J 8037 PISTON RING COMPRESSOR (2-1/8" to 5" dia.)
	J 8062 VALVE SPRING COMPRESSOR (Head-off)
	J 22794 SPARK PLUG PORT ADAPTER (14mm with gasket)
	J 24086-84 PISTON PIN GUIDE
	J 24086-B PISTON PIN REMOVER & INSTALLER SET (Use with J 24086-84) (Featured on page 84)
	J 24239-01 10MM CYLINDER HEAD WRENCH
	J 25225 OIL FILTER WRENCH
	J 28428-D BLACK LIGHT LEAK DETECTOR (Includes 6-1 oz. containers of fluorescent oil additive) (Featured on page 84)

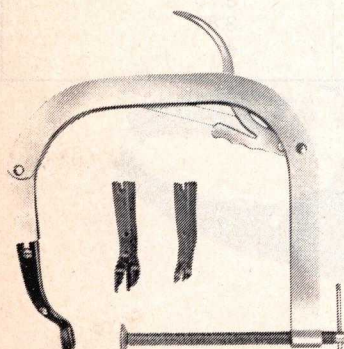
	J 34831 VALVE GUIDE REAMER (7mm)
	J 34832 CYLINDER BLOCK VALVE GUIDE BORE REAMER (12mm)
	J 34833 VALVE GUIDE REMOVER
	J 34834 VALVE GUIDE INSTALLER
	J 34835 VALVE STEM SEAL INSTALLER
	J 34836 CAMSHAFT SPROCKET HOLDER
	J 34853 CRANKSHAFT OIL SEAL PROTECTOR
	J 38606 VALVE SPRING COMPRESSOR (Head-on) (Supercedes J 26513-A) (Featured on page 88)


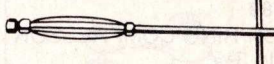
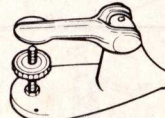
1 MANUFACTURED BY SUZUKI

L-4 1.4L & 1.6L CHEVROLET (T-CAR)²

J 8062 VALVE SPRING COMPRESSOR

This universal valve spring compressor locks with the valve spring compressed, exposing the valve keys for easy removal. (Head off)


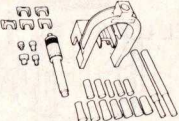
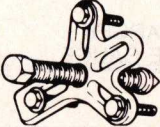
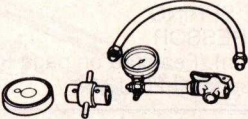





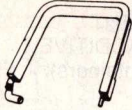
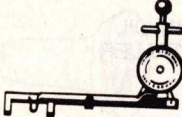



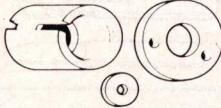
	J 8089 CARBON REMOVING BRUSH (Cast-Iron heads)
	J 8101 VALVE GUIDE CLEANER
	J 9666 VALVE SPRING TESTER

2 MANUFACTURED BY CHEVROLET

GAS ENGINE - MECHANICAL

L-4 1.4L & 1.6L CHEVROLET (T-CAR)² (CONTINUED)

	J 23590 SPARK PLUG PORT ADAPTER (14mm tapered seat)
	J 24086-B PISTON PIN REMOVER & INSTALLER SET (Featured on page 84)
	J 24420-B TIMING BELT SPROCKET REMOVER (1.6L only - use with J 34984)
	J 25087-C OIL PRESSURE TESTER & OIL PUMP PRIMER
	J 25477 VALVE SPRING COMPRESSOR (Head-on 1.6L only)
	J 25510 ENGINE MOUNT SOCKET
	J 26434 FRONT COVER OIL SEAL INSTALLER

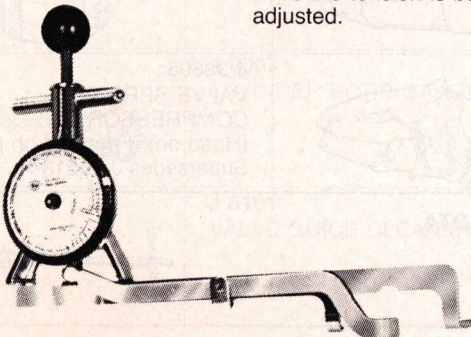
	J 26436 ENGINE LIFTING FIXTURE
	J 26486-B TIMING BELT TENSION GAUGE (1.6L only)
	J 28428-D BLACK LIGHT LEAK DETECTOR (Includes 6-1 oz. containers of fluorescent oil additive) (Featured on page 84)
	J 28509-A CRANKSHAFT SPROCKET REMOVER
	J 29113 CRANKSHAFT SPROCKET INSTALLER (1.6L only)
	J 34984 CRANKSHAFT SPROCKET REMOVER & DRILL GUIDE (Use with J 24420-B)

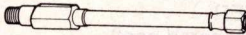
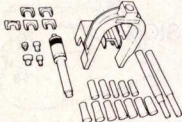


2 MANUFACTURED BY CHEVROLET

L-4 1.5L CHEVROLET (SPECTRUM)³

J 26486-B TIMING BELT TENSION GAUGE

The J 26486-B Timing Belt Tension Gauge assures correct adjustment of timing belt tension on gasoline OHC engines. The gauge features a built-in offset which allows it to be easily positioned on the belt while the tension is being adjusted.

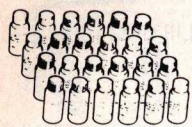

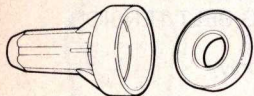
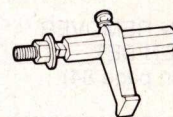
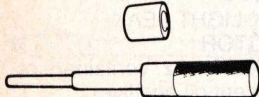
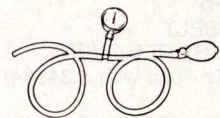
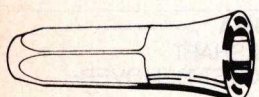
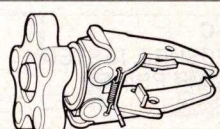


	J 22794 SPARK PLUG PORT ADAPTER (14mm with gasket)
	J 24086-B PISTON PIN REMOVER & INSTALLER SET (Featured on page 84)
	J 28428-D BLACK LIGHT LEAK DETECTOR (Includes 6-1 oz. containers of fluorescent oil additive) (Featured on page 84)
	J 28431-B FLUORESCENT OIL ADDITIVE (24-1 oz. containers)

3 MANUFACTURED BY ISUZU

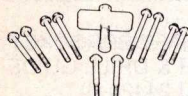
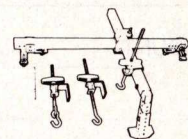

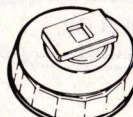
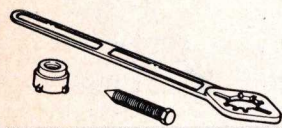
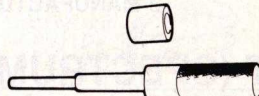

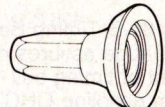
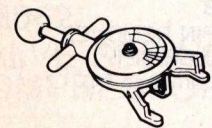
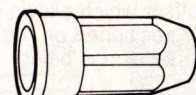
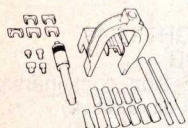
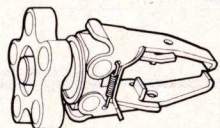
GAS ENGINE - MECHANICAL

L-4 1.5L CHEVROLET (SPECTRUM)³ (CONTINUED)

	J 29545 FLUORESCENT COOLANT ADDITIVE (24-1 oz. containers)		J 35269 CRANKSHAFT FRONT OIL SEAL INSTALLER
	J 35264 REAR MAIN OIL SEAL INSTALLER		J 35271 FLYWHEEL LOCK
	J 35267 VALVE GUIDE REMOVER & INSTALLER		J 35691 TURBOCHARGER PRESSURE GAUGE
	J 35268 CAMSHAFT FRONT OIL SEAL INSTALLER		J 38606 VALVE SPRING COMPRESSOR (Head-on) (Featured on page 88) (supersedes J 26513-A)

3 MANUFACTURED BY ISUZU

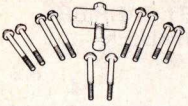

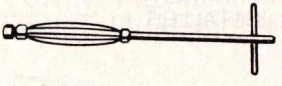
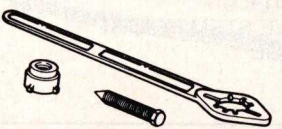
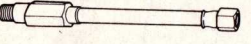
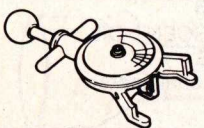
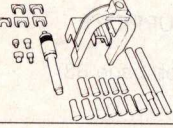

L-4 1.6L CHEVROLET SINGLE OHC (NOVA)⁴

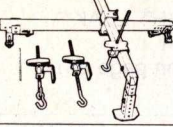
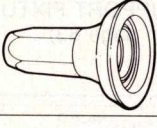
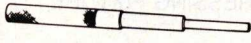
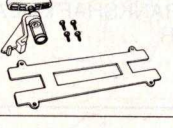

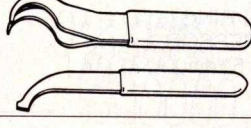
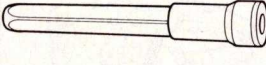
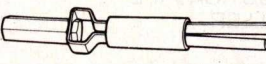
	J 1859-03 CRANKSHAFT PULLEY PULLER		J 28467-A ENGINE SUPPORT FIXTURE (Featured on page 83)
	J 8037 PISTON RING COMPRESSOR (2 1/8" to 5" dia.)		J 34274 OIL FILTER WRENCH
	J 8614-01 CRANKSHAFT PULLEY HOLDER (Featured on page 59)		J 35267 VALVE GUIDE REMOVER & INSTALLER
	J 23590 SPARK PLUG PORT ADAPTER (14mm tapered seat)		J 35388 REAR MAIN SEAL INSTALLER
	J 23600-B BELT TENSION GAUGE		J 35403 FRONT COVER SEAL INSTALLER
	J 24086-B PISTON PIN SERVICE SET (Featured on page 84)		J 38606 VALVE SPRING COMPRESSOR (Head-on) (Featured on page 88) Supersedes J 26513-A

4 MANUFACTURED BY TOYOTA

GAS ENGINE - MECHANICAL


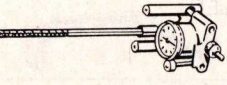
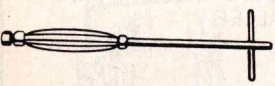
L-4 1.6L TWIN OHC CHEVROLET (NOVA)⁵

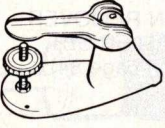
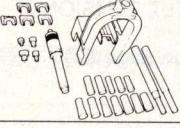
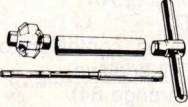
	J 1859-03 CRANKSHAFT PULLEY PULLER
	J 8037 PISTON RING COMPRESSOR
	J 8101 VALVE GUIDE CLEANER
	J 8614-01 CRANKSHAFT PULLEY HOLDER (Featured on page 59)
	J 22794 SPARK PLUG PORT ADAPTER
	J 23600-B BELT TENSION GAUGE
	J 24086-B PISTON PIN REMOVER AND INSTALLER (Featured on page 84)
	J 28428-D BLACK LIGHT LEAK DETECTOR (Featured on page 84)

	J 28467-A ENGINE SUPPORT FIXTURE (Featured on page 83)
	J 35388 REAR MAIN SEAL INSTALLER
	J 37133 VALVE GUIDE BUSHING REMOVER AND INSTALLER
	J 37134 VALVE SPRING COMPRESSOR
	J 37140-A OIL FILTER REMOVER
	J 37141 VALVE CLEARANCE ADJUSTMENT TOOL SET
	J 37280 VALVE GUIDE SEAL INSTALLER
	J 37281-A VALVE GUIDE SEAL REMOVER (Use with J 6125-1B)

5 MANUFACTURED BY TOYOTA

L-4 1.6L OHC PONTIAC (LEMANS)⁶


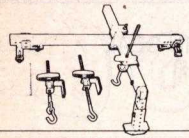
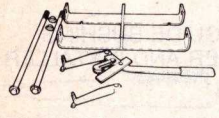
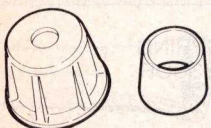
	J 8037 PISTON RING COMPRESSOR
	J 8087 CYLINDER BORE GAUGE
	J 8101 VALVE GUIDE CLEANER

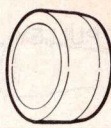
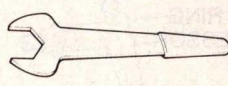
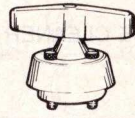
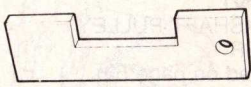
	J 9666 VALVE SPRING TESTER
	J 24086-B PISTON PIN REMOVER AND INSTALLER SET (Featured on page 84)
	J 26541-10 VALVE SEAT CUTTER SET

6 MANUFACTURED BY DAEWOO

GAS ENGINE - MECHANICAL

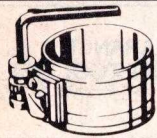
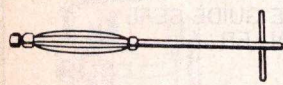
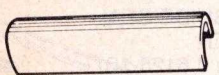
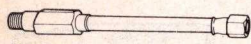
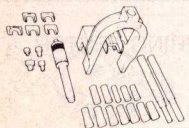
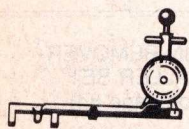

L-4 1.6L OHC PONTIAC (LEMANS)⁶ (CONTINUED)


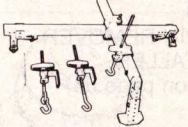
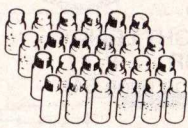
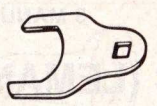
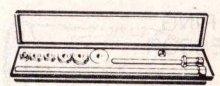
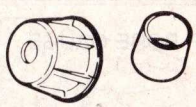
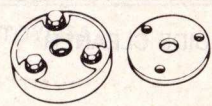
	J 28428-D BLACK LIGHT LEAK DETECTOR (Featured on page 84)
	J 28467-A ENGINE SUPPORT FIXTURE (Featured on page 83)
	J 33302-B VALVE SPRING COMPRESSING FIXTURE
	J 36534 FRONT CRANKSHAFT SEAL INSTALLER

	J 36539 CAMSHAFT CARRIER SEAL INSTALLER
	J 36727 TIMING BELT ADJUSTER
	J 36792 REAR CRANKSHAFT SEAL INSTALLER
	J 37014 VALVE STEM HEIGHT GAUGE

6 MANUFACTURED BY DAEWOO

L-4 1.8L OHC PONTIAC⁷

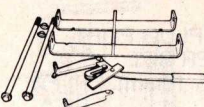
	J 8037 PISTON RING COMPRESSOR (2 1/8" to 5" dia.)
	J 8101 VALVE GUIDE CLEANER
	J 21882 OIL SUCTION PIPE INSTALLER
	J 22794 SPARK PLUG PORT ADAPTER (14mm with gasket)
	J 24086-B PISTON PIN REMOVER AND INSTALLER SET (Featured on page 84)
	J 26486-B TIMING BELT TENSION GAUGE (Featured on page 87)
	J 28428-D BLACK LIGHT LEAK DETECTOR (Includes 6-1 oz. containers of fluorescent oil additive) (Featured on page 84)

	J 28431-B FLUORESCENT OIL ADDITIVE (24-1 oz. containers)
	J 28467-A ENGINE SUPPORT FIXTURE (Featured on page 83)
	J 29545 FLUORESCENT COOLANT ADDITIVE (24-1 oz. containers)
	J 33039-A CAM DRIVE BELT TENSION ADJUSTMENT WRENCH
	J 33049 CAMSHAFT BEARING REMOVER & INSTALLER (Featured on page 107)
	J 33083 FRONT CRANKSHAFT SEAL INSTALLER
	J 33084 REAR CRANKSHAFT SEAL INSTALLER

7 MANUFACTURED BY PONTIAC

GAS ENGINE - MECHANICAL

L-4 1.8L OHC PONTIAC⁷ (CONTINUED)

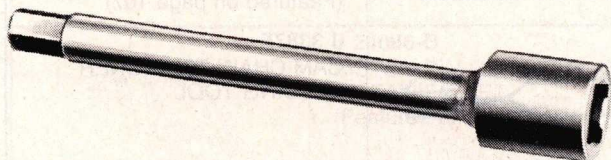
	J 33302-B VALVE TRAIN COMPRESSING FIXTURE
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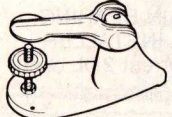
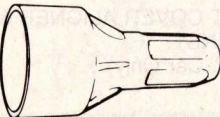
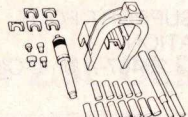
7 MANUFACTURED BY PONTIAC

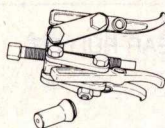
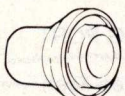


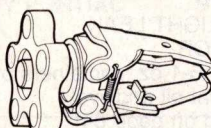
L-4 1.9L CHEVROLET⁸

J 24239-01 10MM HEAD BOLT WRENCH

Head bolts are easily removed and properly tightened to the correct torque with this wrench.

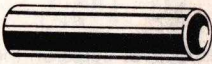
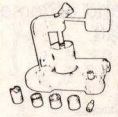

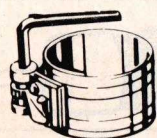


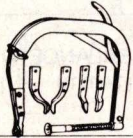
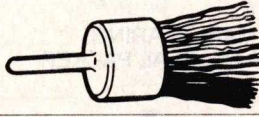
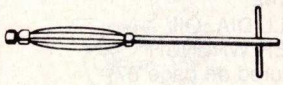
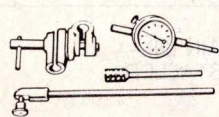
	J 9666 VALVE SPRING TESTER
	J 22928-A REAR MAIN OIL SEAL INSTALLER
	J 24086-B PISTON PIN REMOVER & INSTALLER SET (Featured on page 84)

	J 25031 CAMSHAFT TIMING SPROCKET PULLER
	J 26587 FRONT COVER OIL SEAL INSTALLER
	J 28428-D BLACK LIGHT LEAK DETECTOR (Includes 6-1 oz. containers of fluorescent oil additive) (Featured on page 84)
	J 28431-B FLUORESCENT OIL ADDITIVE (24-1 oz. containers)
	J 38606 VALVE SPRING COMPRESSOR (Head-on) (Featured on page 88) (Supersedes J 26513-A)

8 MANUFACTURED BY ISUZU

L-4 1.8L/2.0L CHEVROLET⁹

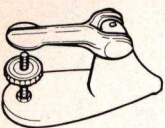

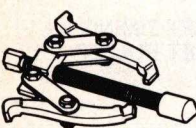

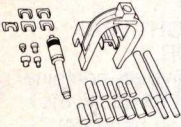
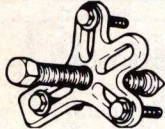

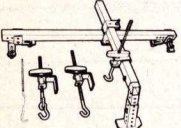

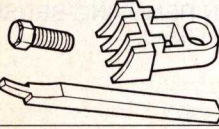
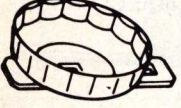
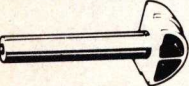
	J 5590 CRANKSHAFT GEAR INSTALLER
	J 5790-B HYDRAULIC VALVE LIFTER TESTER (Includes one gallon of J 26400-1A test oil) (Featured on page 89)
	J 5892-C VALVE SPRING COMPRESSOR (Head-on)
	J 8037 PISTON RING COMPRESSOR (2 1/8" to 5" dia.)

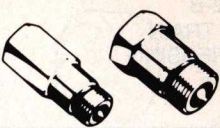
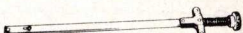
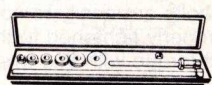
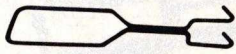
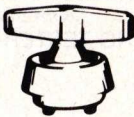
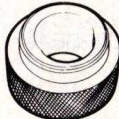
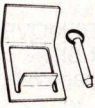
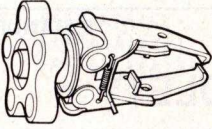
	J 8062 VALVE SPRING COMPRESSOR (Head-off)
	J 8089 CARBON REMOVING BRUSH (Cast-iron heads)
	J 8101 VALVE GUIDE CLEANER
	J 8520 CAM LOBE LIFT INDICATOR

9 MANUFACTURED BY CHEVROLET

GAS ENGINE - MECHANICAL

L-4 1.8L/2.0L CHEVROLET⁹ (CONTINUED)

	J 9666 VALVE SPRING TESTER
	J 21882 OIL SUCTION PIPE INSTALLER
	J 22888-20 TIMING GEAR PULLER
	J 23590 SPARK PLUG PORT ADAPTER (14mm tapered seat)
	J 24086-B PISTON PIN REMOVER & INSTALLER SET (Featured on page 84)
	J 24420-B HARMONIC BALANCER HUB REMOVER
	J 28428-D BLACK LIGHT LEAK DETECTOR (Includes 6-1 oz. containers of fluorescent oil additive) (Featured on page 84)
	J 28467-A ENGINE SUPPORT FIXTURE (Transverse drive only) (Featured on page 83)
	J 29113 HARMONIC BALANCER INSTALLER (14mm)
	J 29114 REAR MAIN BEARING UPPER OIL SEAL PACKER
	J 29142 SMALL DIA. OIL FILTER WRENCH (Featured on page 87)
	J 29590 REAR MAIN OIL SEAL INSTALLER

	J 29833 SPARK PLUG PORT ADAPTER SET (14mm & 18mm)
	J 29834 HYDRAULIC VALVE LIFTER REMOVER
	J 33049 CAMSHAFT BEARING REMOVER & INSTALLER SET (Featured on page 107)
	J 33875 CAM CHAIN TENSIONER LOADING TOOL
	J 34686 REAR MAIN BEARING OIL SEAL INSTALLER (1984 - current 2.0L only)
	J 35468 FRONT COVER ALIGNER & SEAL INST. (1990 L-Car Only)
	J 35953 ENGINE SUPPORT FOOT MODIFICATION (Use with J 28467-A on L-Car)
	J 38606 VALVE SPRING COMPRESSOR (Head-on 2.0L only) (Supersedes J 26513-A) (Featured on page 88)

J 35468 FRONT COVER ALIGNER AND SEAL INSTALLER


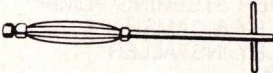
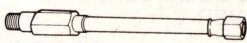
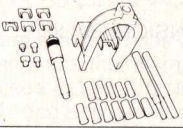
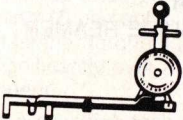
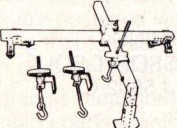
The front cover seals on the 1.8 and 2.0 liter 4 cylinder engine require this tool for installation and alignment to the crankshaft.

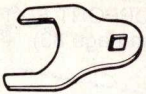
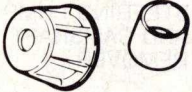
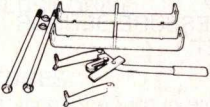

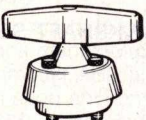


9 MANUFACTURED BY CHEVROLET

GAS ENGINE - MECHANICAL



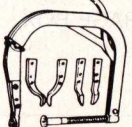
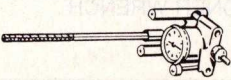

L-4 2.0L OHC PONTIAC¹⁰

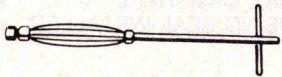
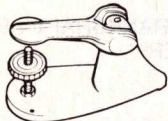
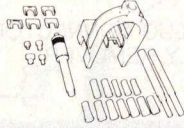
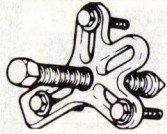

	J 8037 PISTON RING COMPRESSOR (2 1/8" to 5" dia.)
	J 8101 VALVE GUIDE CLEANER
	J 22794 SPARK PLUG PORT ADAPTER (14mm with gasket)
	J 24086-B PISTON PIN REMOVER AND INSTALLER SET (Featured on page 84)
	J 26486-B TIMING BELT TENSION GAUGE (Featured on page 87)
	J 28467-A ENGINE SUPPORT FIXTURE (Featured on page 83)

	J 33039-A CAM DRIVE BELT TENSION ADJUSTMENT WRENCH
	J 33083 FRONT CRANKSHAFT SEAL INSTALLER
	J 33302-B VALVE TRAIN COMPRESSING FIXTURE
	J 33302-25 COMPRESSOR FOOT (Included with J 33302-B)
	J 36227 REAR CRANKSHAFT SEAL INSTALLER & PROTECTOR

10 MANUFACTURED BY PONTIAC

L-4 2.3L OLDSMOBILE (QUAD 4)¹¹

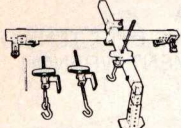
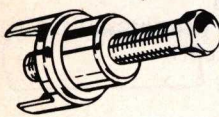
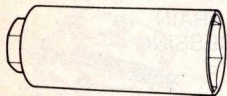
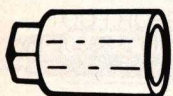
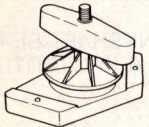
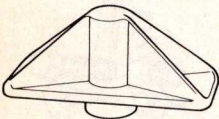
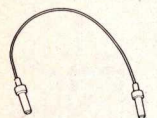

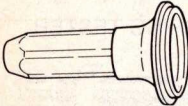
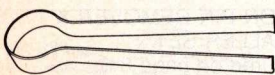
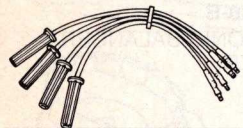
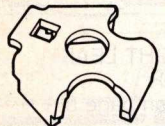
	J 5892-C VALVE SPRING COMPRESSOR (Used with J 36588)
	J 8037 PISTON RING COMPRESSOR (2 1/8" to 5" diameter)
	J 8062 VALVE SPRING COMPRESSOR (Head-off) (Featured on page 90)
	J 8087 CYLINDER BORE GAUGE
	J 8089 CARBON REMOVING BRUSH (Cast-iron heads)

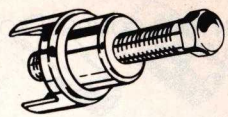
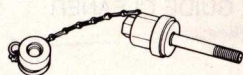
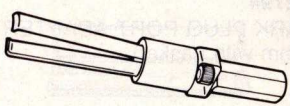
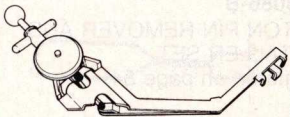
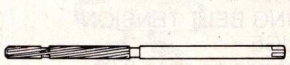
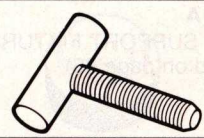
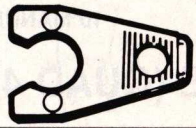

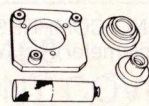
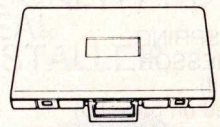
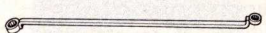
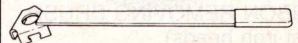
	J 8101 VALVE GUIDE CLEANER
	J 9666 VALVE SPRING TESTER
	J 24086-B PISTON PIN REMOVER & INSTALLER SET (Featured on page 84)
	J 24420-B HARMONIC BALANCER PULLER
	J 28428-D BLACK LIGHT LEAK DETECTOR (Featured on page 84)

11 MANUFACTURED BY OLDSMOBILE

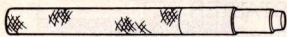
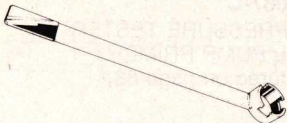
GAS ENGINE - MECHANICAL

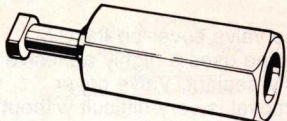
L-4 2.3L OLDSMOBILE (QUAD 4)11 (CONTINUED)

	J 28467-A ENGINE SUPPORT FIXTURE (Featured on page 83)
	J 25034-B POWER STEERING PUMP PULLEY AND CAMSHAFT PULLEY REMOVER
	J 35748 OIL PRESSURE SENSOR SOCKET
	J 35749 OIL PRESSURE SWITCH SOCKET
	J 36005 REAR CRANKSHAFT SEAL INSTALLER
	J 36007 VALVE GUIDE SEAL INSTALLER
	J 36008 CAMSHAFT SPROCKET TIMING ALIGNMENT PINS
	J 36009 INTAKE CAMSHAFT HOUSING SEAL INSTALLER
	J 36010 FRONT CRANKSHAFT SEAL INSTALLER
	J 36011 SPARK PLUG CONNECTOR ASSEMBLY REMOVER
	J 36012 IGNITION SYSTEM DIAGNOSTIC HARNESS
	J 36013 CAMSHAFT SPROCKET WRENCH

	J 36014-A POWER STEERING PUMP PULLEY & CAMSHAFT PULLEY REMOVER
	J 36015 POWER STEERING PUMP PULLEY & CAMSHAFT PULLEY INSTALLER
	J 36017 VALVE GUIDE SEAL REMOVER
	J 36018 BELT TENSION GAUGE
	J 36019-A VALVE GUIDE REAMER
	J 36588 VALVE SPRING COMPRESSOR T-BOLT (Use with J 5892-C)
	J 36589 TIMING CHAIN TENSIONER SPACER
	J 36660 TORQUE ANGLE METER (Featured on page 99)
	J 36998 TIMING CHAIN HOUSING IDLER SPROCKET BEARING REMOVER & INSTALLER SET
	J 36999 TOOL STORAGE BOX
	J 37059 SERPENTINE BELT TENSIONER WRENCH
	J 37086 HARMONIC BALANCER HOLDER

L-4 2.3L OLDSMOBILE (QUAD 4)11 (CONTINUED)

	J 37868 CAMSHAFT OIL GALLEY PLUG INSTALLER
	J 38122 HARMONIC BALANCER HOLDER (1990 Quad 4 including H/O version)

	J 38123 OIL FLOW CHECK VALVE REMOVER & INSTALLER (use with J 6125-1B)
	J 38606 VALVE SPRING COMPRESSOR (Head-on) (Featured on page 88) (Supersedes J 26513-A)

11 MANUFACTURED BY OLDSMOBILE

J 36660 TORQUE/ANGLE METER

The torque wrench has been the standard for years for tightening bolts and nuts that clamp parts together. Torque is actually the force used to turn a fastener (bolt or nut) against friction (between threads and between fastener head and component surface). It is a fact that up to 90 percent of torque is used up by friction. The remaining 10 percent is used to clamp parts together. So, by using fastener torque tightening methods, clamping forces can vary significantly over a single cylinder head or other engine component.

Because new high tech products such as the Oldsmobile Quad 4 Engine are designed with extremely close tolerances, it is not surprising that torque alone is no longer adequate for proper service procedures on this type of product.

Torque/angle measurement of fastener installations is a method of clamping parts together which insures that like fasteners will exert the same clamp force without deviation from one fastener to the next. Without proper clamping forces, distortion of cylinder bores and bearing bores may occur as well as leaking head gaskets.

The torque/angle method first specifies a low threshold torque on the fastener to get components in close touch. Torque is least affected by fastener friction at these low values.

The fasteners are then turned through a specified angle. The clamping force of each fastener will then be consistent.

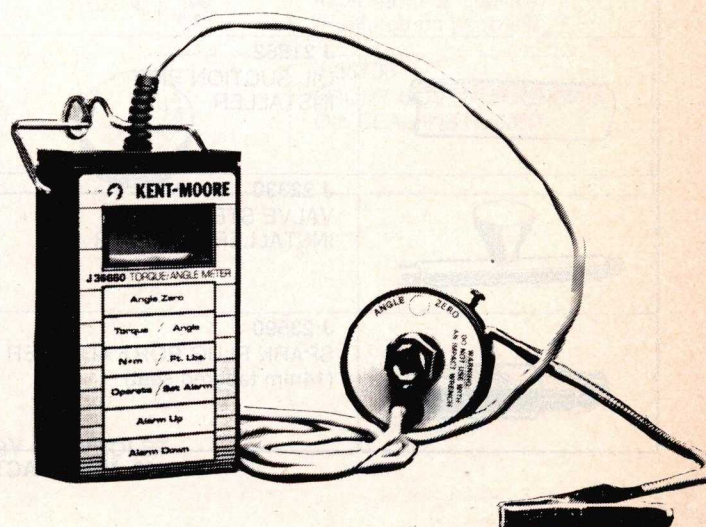
J 36660 is a precision, microprocessor controlled torque/angle meter which will insure fasteners are tightened to true clamp load specifications consistently and easily.

FEATURES:

- Replaces the torque wrench
- Can be used as a torque wrench alone
- Never needs calibrating
- Microprocessor controlled
- State-of-the-art electronics
- Touch pad function controls
- Manufacturer's Torque/Angle specifications can be preset in memory
- Audible alarm to signal operator when fastener tightening reaches manufacturer's specification
- High impact ABS plastic instrument housing stands up to tough shop environment
- J 36660 accommodates 1/2" square drive or 1" hex wrench
- Custom liquid crystal display readout with operational modes and units displayed for ease of operation
- Torque can be displayed in either ft. lbs. or N•m
- Automatic shut-off
- Overload alarm when 200 ft. lbs. of torque is reached
- Storage case
- Complete, easy-to-read operating instructions
- Handy Service Hook

SPECIFICATIONS:

- 0 to 200 ft. lb. and 0 to 266 N•m torque range
- 0 degrees to 360 degrees angle range
- Three digit, LCD type readout
- 25 hour battery life (9 volt alkaline)
- Torque/Angle accuracy is $\pm 1\%$ on all scales




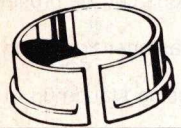
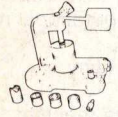

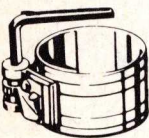
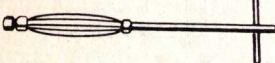



GAS ENGINE - MECHANICAL

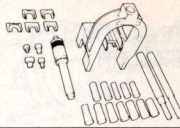
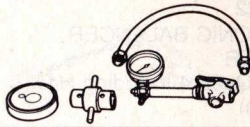


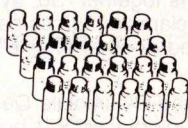
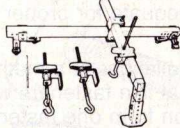
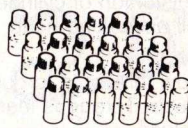
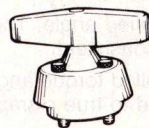
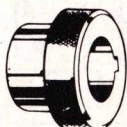
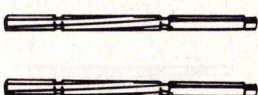
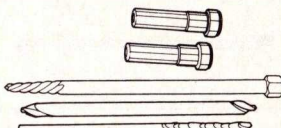
L-4 2.5L PONTIAC¹²

J 34144-A VALVE COVER REMOVER



The valve cover on the 2.5L engine uses a highly adhesive RTV sealant. Valve cover removal is very difficult without the J 34144-A. To use J 34144-A, simply remove the valve cover bolts and use these two tools to pull the cover without damage to the cover or the cylinder head.

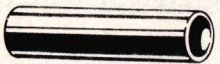
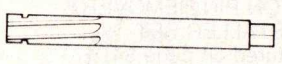
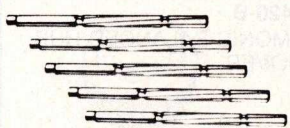

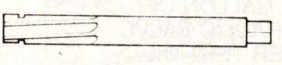
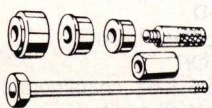
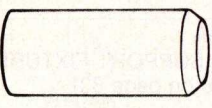

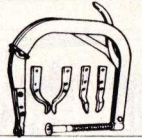
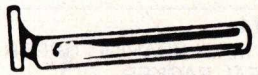

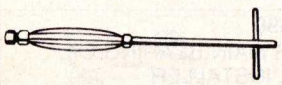
	J 3049 VALVE LIFTER REMOVER
	J 5569 PISTON RING COMPRESSOR (4" dia.)
	J 5790-B HYDRAULIC VALVE LIFTER TESTER (Includes one gallon of J 26400-1A test oil) (Featured on page 89)
	J 5892-C VALVE SPRING COMPRESSOR (Head-on)
	J 8037 PISTON RING COMPRESSOR (2 1/8" to 5" dia.)
	J 8101 VALVE GUIDE CLEANER
	J 21882 OIL SUCTION PIPE INSTALLER
	J 22330 VALVE STEM SEAL INSTALLER & TESTER
	J 23590 SPARK PLUG PORT ADAPTER (14mm tapered seat)

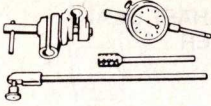
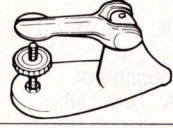
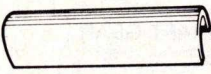
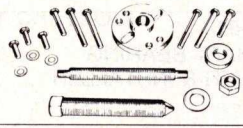

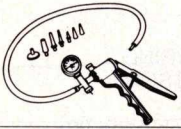
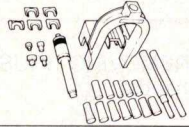
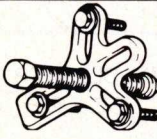


	J 24086-B PISTON PIN REMOVER & INSTALLER SET (Featured on page 84)
	J 25087-C OIL PRESSURE TESTER & OIL PUMP PRIMER (Featured on page 88)
	J 26400-1B ONE GALLON OF HYDRAULIC VALVE LIFTER TEST OIL
	J 28428-D BLACK LIGHT LEAK DETECTOR (Includes 6-1 oz. containers of fluorescent oil additive) (Featured on page 84)
	J 28431-B FLUORESCENT OIL ADDITIVE (24-1 oz. containers)
	J 28467-A ENGINE SUPPORT FIXTURE (Transverse drive only) (Featured on page 83)
	J 29545 FLUORESCENT COOLANT ADDITIVE (24-1 oz. containers)
	J 34924-A REAR MAIN BEARING OIL SEAL INSTALLER
	J 34995 CRANKSHAFT FRONT COVER OIL SEAL INSTALLER
	J 37405 VALVE GUIDE REAMER SET
	J 38188 BROKEN CYLINDER HEAD BOLT EXTRACTOR KIT (1984-88)

12 MANUFACTURED BY PONTIAC

GAS ENGINE - MECHANICAL

L-6 250 & 292 C.I.D. CHEVROLET¹³

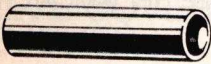
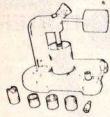
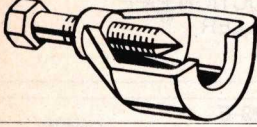
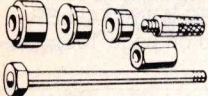
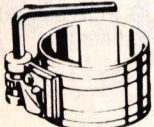
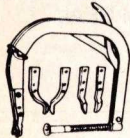

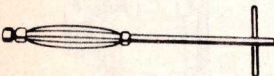
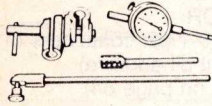
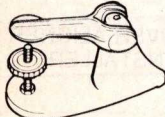


	J 5590 CRANKSHAFT GEAR INSTALLER
	J 5715 3/8" ROCKER ARM STUD REAMER (.003" O.S.)
	J 5830-02 VALVE GUIDE REAMER SET (Includes J 5830-1, -2, -3, -4, -5)
	J 5892-C VALVE SPRING COMPRESSOR (Head-on)
	J 6036 3/8" ROCKER ARM STUD HOLE REAMER (.013" oversize)
	J 6098-01 CAMSHAFT BEARING REMOVER & INSTALLER
	J 6880 ROCKER ARM STUD INSTALLER
	J 8037 PISTON RING COMPRESSOR (2 1/8" to 5" dia.)
	J 8062 VALVE SPRING COMPRESSOR (Head-off) (Featured on page 90)
	J 8080 MAIN BEARING SHELL REMOVER & INSTALLER
	J 8089 CARBON REMOVING BRUSH (All cast-iron heads)
	J 8101 VALVE GUIDE CLEANER

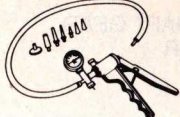
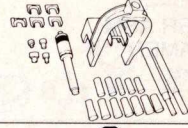
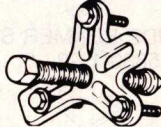
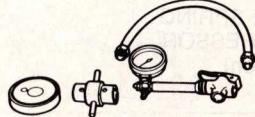


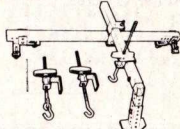
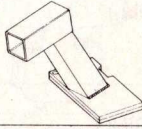

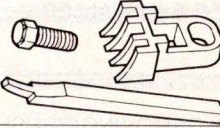

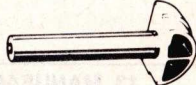
	J 8520 CAM LOBE LIFT INDICATOR
	J 9666 VALVE SPRING TESTER
	J 21882 OIL SUCTION PIPE INSTALLER
	J 23523-E HARMONIC BALANCER REMOVER & INSTALLER (Featured on page 105)
	J 23590 SPARK PLUG PORT ADAPTER (14mm tapered seat)
	J 23738-A VALVE STEM SEAL TESTER (Mity-Vac)
	J 24086-B PISTON PIN REMOVER & INSTALLER SET (Featured on page 84)
	J 24420-B CRANKSHAFT GEAR PULLER
	J 28428-D BLACK LIGHT LEAK DETECTOR (Includes 6-1 oz. containers of fluorescent oil additive) (Featured on page 84)
	J 35468 FRONT COVER ALIGNER & OIL SEAL INSTALLER

13 MANUFACTURED BY CHEVROLET

GAS ENGINE - MECHANICAL

V-6 2.8L/3.1L CHEVROLET¹⁴

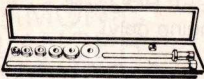
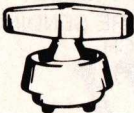
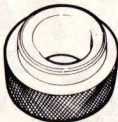
	J 5590 CRANKSHAFT GEAR INSTALLER
	J 5790-B HYDRAULIC VALVE LIFTER TESTER (Includes 1 gallon of J 26400-1A, Test Oil) (Featured on page 89)
	J 5825-A CRANKSHAFT GEAR REMOVER
	J 6098-01 CAMSHAFT BEARING REMOVER & INSTALLER
	J 8037 PISTON RING COMPRESSOR (2 1/8" to 5" dia.)
	J 8062 VALVE SPRING COMPRESSOR (Head-off) (Featured on page 90)
	J 8089 CARBON REMOVING BRUSH (Cast-iron heads)
	J 8101 VALVE GUIDE CLEANER
	J 8520 CAM LOBE LIFTER INDICATOR
	J 9666 VALVE SPRING TESTER
	J 21882 OIL SUCTION PIPE INSTALLER
	J 23590 SPARK PLUG PORT ADAPTER (14mm tapered seat)


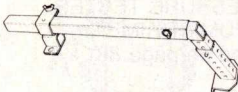
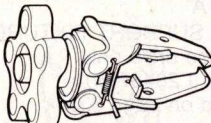
	J 23738-A VALVE STEM SEAL TESTER (Mity-Vac)
	J 24086-B PISTON PIN REMOVER & INSTALLER SET (Featured on page 84)
	J 24420-B HARMONIC BALANCER HUB REMOVER
	J 25087-C OIL PRESSURE TESTER & OIL PUMP PRIMER (Featured on page 88)
	J 26400-1B ONE GALLON OF HYDRAULIC VALVE LIFTER TEST OIL
	J 28428-D BLACK LIGHT LEAK DETECTOR (Includes 6-1 oz. containers of fluorescent oil additive) (Featured on page 84)
	J 28467-A ENGINE SUPPORT FIXTURE (Featured on page 83)
	J 28467-60 ENGINE SUPPORT FOOT (Pontiac Fiero GT Fastback) Use with J 28467-A
	J 29113 HARMONIC BALANCER INSTALLER (14mm)
	J 29114 REAR MAIN BEARING UPPER OIL SEAL PACKER
	J 29176 TIMING COVER RETAINER
	J 29590 REAR MAIN BEARING OIL SEAL INSTALLER (Rope seal)

14 MANUFACTURED BY CHEVROLET

GAS ENGINE - MECHANICAL


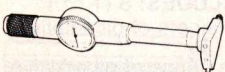

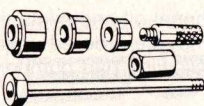

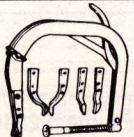
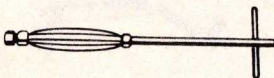

V-6 2.8L/3.1L CHEVROLET¹⁴ (CONTINUED)

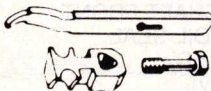

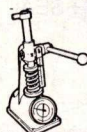
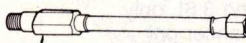




	J 33049 CAMSHAFT BEARING REMOVER & INSTALLER (Featured on page 107)
	J 34686 REAR MAIN BEARING OIL SEAL INSTALLER - Lip Seal (1984 - Current)
	J 35468 FRONT COVER ALIGNER & OIL SEAL INSTALLER

	J 35953 ENGINE SUPPORT FOOT MODIFICATION (Use with J 28467-A on W-car)
	J 36462 ENGINE SUPPORT ADAPTER LEG SET (Use with J 28467-A on W-car)
	J 38606 VALVE SPRING COMPRESSOR (Head-on) (Featured on page 88)

14 MANUFACTURED BY CHEVROLET

V-6 3.0L, 3.8L & 4.1L BUICK¹⁵

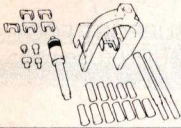
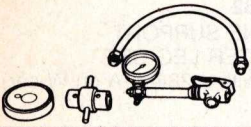
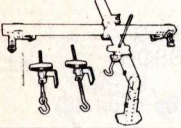
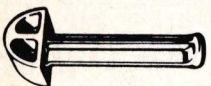
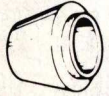

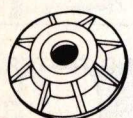
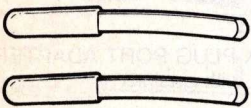
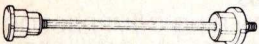


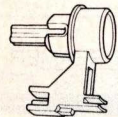
	J 3049 VALVE LIFTER REMOVER
	J 5347-B DIAL BORE GAUGE (3" to 8" Range use with J 23059-01)
	J 5790-B HYDRAULIC VALVE LIFTER TESTER (Includes 1 gallon of J 26400-1A, Test oil) (Featured on page 89)
	J 6098-01 CAMSHAFT BEARING REMOVER & INSTALLER
	J 8037 PISTON RING COMPRESSOR (2 1/8" to 5" dia.)
	J 8062 VALVE SPRING COMPRESSOR (Head-off) (Featured on page 90)
	J 8101 VALVE GUIDE CLEANER
	J 9666 VALVE SPRING TESTER

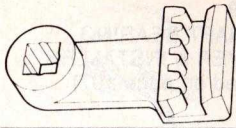
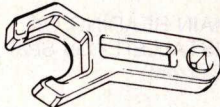
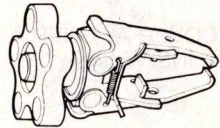
	J 21526 REAR MAIN BEARING UPPER OIL SEAL PACKER (3.8L & 4.1L only) (Featured on page 111)
	J 21882 OIL SUCTION PIPE INSTALLER
	J 22738-02 VALVE SPRING TESTER
	J 22794 SPARK PLUG PORT ADAPTER (14mm with gasket)
	J 22965 PISTON RING COMPRESSOR (3.0L & 3.8L only, 3.8" dia.)
	J 37377 VALVE GUIDE REAMER
	J 37378 VALVE GUIDE REAMER
	J 37379 VALVE GUIDE REAMER

15 MANUFACTURED BY BUICK

GAS ENGINE - MECHANICAL

V-6 3.0L, 3.8L & 4.1L BUICK¹⁵ (CONTINUED)

	J 24086-B PISTON PIN REMOVER & INSTALLER SET (Featured on page 84)
	J 25087-C OIL PRESSURE TESTER & OIL PUMP PRIMER (Featured on page 88)
	J 28467-A ENGINE SUPPORT FIXTURE Transverse drive only (Includes J 28467-50) (Featured on page 83)
	J 28693 REAR MAIN BEARING OIL SEAL INSTALLER
	J 29662 CRANKSHAFT FRONT COVER OIL SEAL INSTALLER (4.1L only)
	J 29843-8 FRONT INTAKE MANIFOLD BOLT WRENCH (T-45)
	J 35354 FRONT COVER SEAL INSTALLER (3.0L only)
	J 36179 CRANKSHAFT SENSOR GAP GAUGE (3.0L and 3.8L only with balancer on)
	J 36995 BALANCE SHAFT REAR BEARING INSTALLER (3800 engine only)
	J 36996 BALANCE SHAFT INSTALLER (3800 engine only)
	J 37059 SERPENTINE BELT TENSIONER WRENCH
	J 37089-A CRANKSHAFT SENSOR ADJUSTER AND BALANCER CHECKER (3800 engine only)

	J 37096 FLYWHEEL HOLDER (3800 engine only)
	J 37398 OIL PRESSURE SENDING UNIT WRENCH (3.0L in N-Car)
	J 38606 VALVE SPRING COMPRESSOR (Head-on) (Supersedes J 26513-A) (Featured on page 88)

J 28428-D HIGH INTENSITY BLACK LAMP



The J 28428-D Leak Detector allows the technician to pinpoint the source of engine, transmissions, power steering or cooling system leaks in minutes . . . even in well-lighted areas.

INCLUDES: 6 (1 oz.) containers of oil additive

One ounce of oil additive contains enough fluorescent dye for the average engine. Leaking oil from a transmission, crankcase or power steering assembly will fluoresce a brilliant yellow with the J 28428-D High Intensity Black Lamp.

Additional oil and coolant dye may be ordered under the following part numbers:

Fluorescent Oil Additive

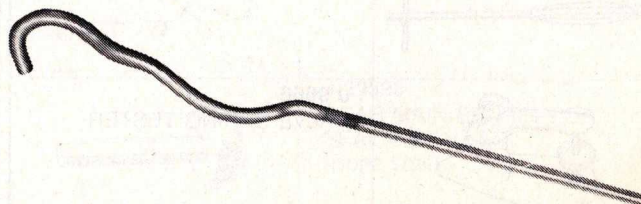
J 28431-B	24 (1 oz.) containers
J 28431-6	6 (1 oz.) containers
J 28431-22	1 (22 oz.) bottle

Fluorescent Coolant Additive

J 29545	24 (1 oz.) containers
J 29545-6	6 (1 oz.) containers

J 28467-50 ENGINE SUPPORT HOOK

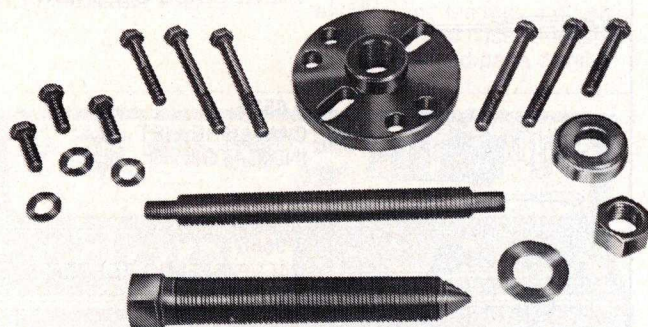
This specially designed hook is included with the J 28467-A Engine Support Fixture to support the 3.8 liter engine.



V-6 3.8L CHEVROLET¹⁶

J 23523-E HARMONIC BALANCER REMOVER & INSTALLER

This tool quickly and easily removes and installs the Harmonic Balancer on Chevrolet V-8, V-6, & L-6 engines.



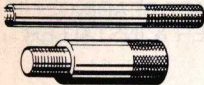
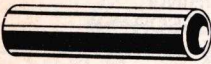
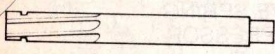
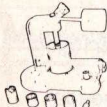



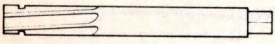
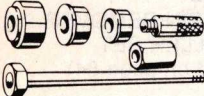


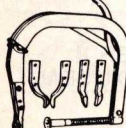
	J 5239 CONNECTING ROD BOLT GUIDE SET ($\frac{3}{8}$ -24)
	J 5590 CRANKSHAFT GEAR INSTALLER
	J 5715 $\frac{3}{8}$ " ROCKER ARM STUD REAMER (.003" O.S.)
	J 5802-01 ROCKER ARM STUD REMOVER
	J 5825-A CRANKSHAFT GEAR REMOVER
	J 5830-02 VALVE GUIDE REAMER SET (Includes J 5830-1, -2, -3, -4, -5)
	J 5892-C VALVE SPRING COMPRESSOR (Head-on)
	J 6036 $\frac{3}{8}$ " ROCKER ARM STUD HOLE REAMER (.013" O.S.)


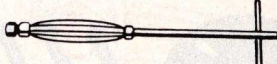
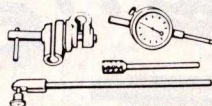
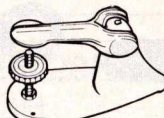
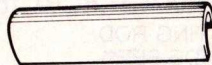
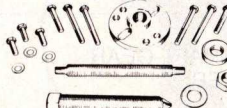


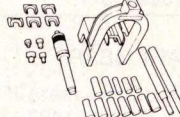
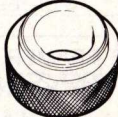
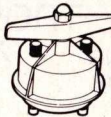
	J 6098-01 CAMSHAFT BEARING REMOVER & INSTALLER
	J 8037 PISTON RING COMPRESSOR ($2\frac{1}{8}$ " to 5" dia.)
	J 8062 VALVE SPRING COMPRESSOR (Head-off) (Featured on page 90)
	J 8089 CARBON REMOVING BRUSH (All Cast-iron heads)
	J 8101 VALVE GUIDE CLEANER
	J 8520 CAM LOBE LIFT INDICATOR
	J 9666 VALVE SPRING TESTER
	J 23738-A VALVE STEM SEAL TESTER (Mity-vac)
	J 24086-B PISTON PIN REMOVER & INSTALLER SET (Featured on page 84)
	J 28428-D BLACK LIGHT LEAK DETECTOR (Includes 6-1 oz. containers of fluorescent oil additive) (Featured on page 84)
	J 28431-B FLUORESCENT OIL ADDITIVE (24-1 oz. containers)
	J 35468 FRONT COVER ALIGNER & OIL SEAL INSTALLER

16 MANUFACTURED BY CHEVROLET

GAS ENGINE - MECHANICAL

V-6 4.3L CHEVROLET¹⁷

	J 5239 CONNECTING ROD BOLT GUIDE SET (3/8-24)
	J 5590 CRANKSHAFT GEAR INSTALLER
	J 5715 3/8" ROCKER ARM STUD REAMER (.003 O.S.)
	J 5790-B HYDRAULIC VALVE LIFTER TESTER (Includes one gallon of J 26400-1A test oil) (Featured on page 89)
	J 5802-01 ROCKER ARM STUD REMOVER
	J 5825-A CRANKSHAFT GEAR PULLER
	J 5892-C VALVE SPRING COMPRESSOR (Head-on)
	J 6036 3/8" ROCKER ARM STUD HOLE REAMER (.013 oversize)
	J 6098-01 CAMSHAFT BEARING REMOVER & INSTALLER
	J 6880 ROCKER ARM STUD INSTALLER
	J 8037 PISTON RING COMPRESSOR (2 1/8" to 5" dia.)
	J 8062 VALVE SPRING COMPRESSOR (Head-off) (Featured on page 90)

	J 8089 CARBON REMOVING BRUSH (All Cast-iron heads)
	J 8101 VALVE GUIDE CLEANER
	J 8520 CAM LOBE LIFT INDICATOR
	J 9666 VALVE SPRING TESTER
	J 21882 OIL SUCTION PIPE INSTALLER
	J 23523-E HARMONIC BALANCER REMOVER & INSTALLER (Featured on page 105)
	J 23590 SPARK PLUG PORT ADAPTER (14mm tapered seat)
	J 23738-A VALVE STEM SEAL TESTER (Mity-Vac)
	J 24086-B PISTON PIN REMOVER & INSTALLER SET (Featured on page 84)
	J 35468 FRONT COVER ALIGNER & OIL SEAL INSTALLER
	J 35621 REAR MAIN SEAL INSTALLER (90° V-6)

17 MANUFACTURED BY CHEVROLET

V-8 4.1L & 4.5L CADILLAC ALUMINUM BLOCK¹⁸

J 33049 UNIVERSAL CAMSHAFT BEARING REMOVER & INSTALLER SET

This set includes five expandable collet style drivers which allow removal and installation of any cam bearing from 1.120" to 2.690". It can be used on most automotive engines and features a durable plastic storage case. Complete instructions and parts diagram are included.


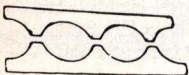
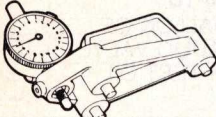
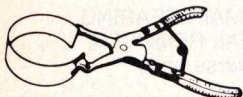
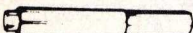


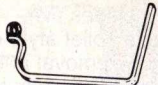
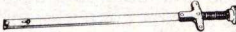
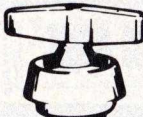
	J 1859-03 FRONT COVER OIL SEAL PULLER (Use with J 23129)
	J 3074 HYDRAULIC VALVE LIFTER TESTER
	J 5790-B HYDRAULIC VALVE LIFTER TESTER (Includes one gallon of J 26400-1A test oil) (Featured on page 89)
	J 8062 VALVE SPRING COMPRESSOR (Head-off) (Featured on page 90)
	J 8080 MAIN BEARING SHELL REMOVER & INSTALLER
	J 8358 CARBON REMOVING BRUSH (Aluminum)
	J 21052-02 HARMONIC BALANCER REMOVER
	J 22794 SPARK PLUG PORT ADAPTER (14mm with gasket)

	J 23129 FRONT COVER OIL SEAL PULLER (2 required & must be used with J 1859-03)
	J 24086-B PISTON PIN REMOVER AND INSTALLER SET (Featured on page 84)
	J 26400-1B ONE GALLON OF HYDRAULIC VALVE LIFTER TEST OIL
	J 26868 REAR MAIN BEARING OIL SEAL REMOVER (Transverse only)
	J 28410 GASKET REMOVER (Aluminum components)
	J 28428-D BLACK LIGHT LEAK DETECTOR (Includes 6-1 oz. containers of fluorescent oil additive) (Featured on page 84)
	J 28431-B FLUORESCENT OIL ADDITIVE (24-1 oz. containers)
	J 28467-A ENGINE SUPPORT FIXTURE (Transverse drive only) (Featured on page 83)
	J 29142 SMALL DIAMETER OIL FILTER WRENCH (Featured on page 87)
	J 29545 FLUORESCENT COOLANT ADDITIVE (24-1 oz. containers)
	J 29610 ENGINE THREAD REPAIR KIT
	J 29662 CRANKSHAFT FRONT COVER OIL SEAL INSTALLER

GAS ENGINE - MECHANICAL

V-8 4.1L & 4.5L CADILLAC ALUMINUM BLOCK¹⁸ (CONTINUED)

	J 29774 HARMONIC BALANCER INSTALLER (16mm)
	J 29775 CYLINDER LINER CLAMP
	J 29776 CYLINDER LINER HEIGHT GAUGE
	J 29789 PISTON RING COMPRESSOR (3 3/8" to 3 7/8" dia.)
	J 29790 VALVE STEM SEAL INSTALLER

	J 29791 DISTRIBUTOR WRENCH
	J 29834 HYDRAULIC VALVE LIFTER REMOVER
	J 34604 REAR MAIN BEARING OIL SEAL INSTALLER (Transverse drive only)
	J 38606 VALVE SPRING COMPRESSOR (Head-on) (Featured on page 88) (Supersedes J 26513-A)

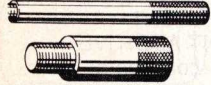
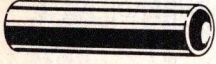
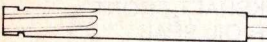
18 MANUFACTURED BY CADILLAC

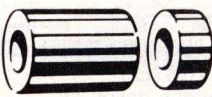


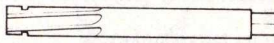
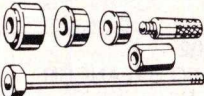
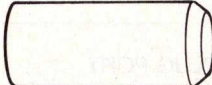
V-8 5.0L & 5.7L CHEVROLET (SMALL BLOCK)¹⁹

J 8037 PISTON RING COMPRESSOR

J 8037 is used to compress piston rings for pistons from 2 1/8" to 5.0" in diameter.




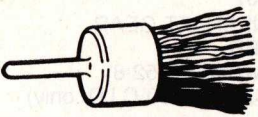
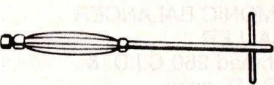
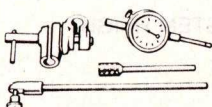
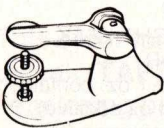


	J 5239 CONNECTING ROD BOLT GUIDE SET (3/8"-24)
	J 5590 CRANKSHAFT GEAR INSTALLER
	J 5715 3/8" ROCKER ARM STUD REAMER (.003" O.S.)


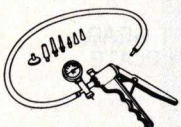
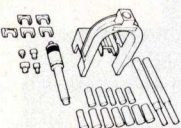



	J 5802-01 ROCKER ARM STUD REMOVER
	J 5825-A CRANKSHAFT GEAR PULLER
	J 5892-C VALVE SPRING COMPRESSOR (Head-on)
	J 6036 3/8" ROCKER ARM STUD HOLE REAMER (.013" oversize)
	J 6098-01 CAMSHAFT BEARING REMOVER & INSTALLER
	J 6880 ROCKER ARM STUD INSTALLER

19 MANUFACTURED BY CHEVROLET

GAS ENGINE - MECHANICAL

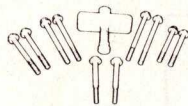
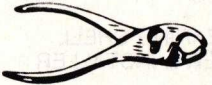
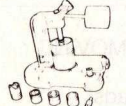

V-8 5.0L & 5.7L CHEVROLET (SMALL BLOCK)¹⁹ (CONTINUED)

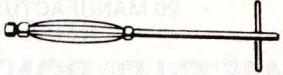
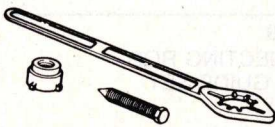
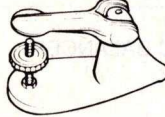

	J 8062 VALVE SPRING COMPRESSOR (Head-off) (Featured on page 90)
	J 8089 CARBON REMOVING BRUSH (All Cast-Iron heads)
	J 8101 VALVE GUIDE CLEANER
	J 8520 CAM LOBE LIFT INDICATOR
	J 9666 VALVE SPRING TESTER
	J 21882 OIL SUCTION PIPE INSTALLER
	J 23523-E HARMONIC BALANCER REMOVER & INSTALLER (Featured on page 105)

	J 23590 SPARK PLUG PORT ADAPTER (14mm tapered seat)
	J 23738-A VALVE STEM SEAL TESTER (Mity-Vac)
	J 24086-B PISTON PIN REMOVER & INSTALLER SET (Featured on page 84)
	J 28428-D BLACK LIGHT LEAK DETECTOR (Includes 6-1 oz. containers of fluorescent oil additive) (Featured on page 84)
	J 35468 FRONT COVER ALIGNER & OIL SEAL INSTALLER
	J 35621 REAR MAIN SEAL INSTALLER

19 MANUFACTURED BY CHEVROLET

V-8 260, 350, 455 C.I.D. & 5.0L OLDSMOBILE²⁰



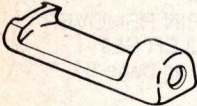
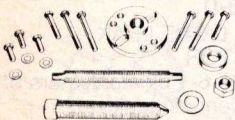

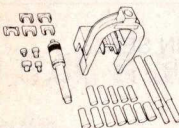


	J 1859-03 CRANKSHAFT FRONT COVER OIL SEAL PULLER (Use with two of J 23129)
	J 3049 VALVE LIFTER REMOVER
	J 5790-B HYDRAULIC VALVE LIFTER TESTER (Includes 1 gallon of J 26400-1A test oil) (Featured on page 89)
	J 8037 PISTON RING COMPRESSOR (2 1/8" to 5" dia.)


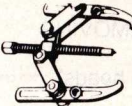

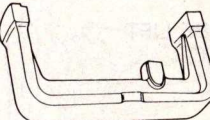

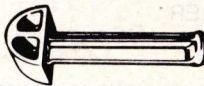
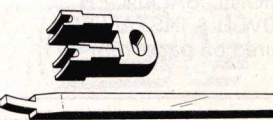
	J 8101 VALVE GUIDE CLEANER
	J 8614-01 HARMONIC BALANCER REMOVER (Featured on page 59)
	J 9666 VALVE SPRING TESTER
	J 21052-8 HARMONIC BALANCER REMOVER ADAPTER (Use with J 23523-E 260 C.I.D. & 350 C.I.D. only)

20 MANUFACTURED BY OLDSMOBILE

GAS ENGINE - MECHANICAL

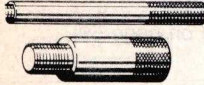

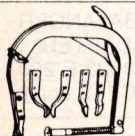
V-8 260, 350, 455 C.I.D. & 5.0L OLDSMOBILE²⁰ (CONTINUED)



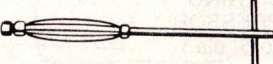
	J 21882 OIL SUCTION PIPE INSTALLER
	J 22227-A CAMSHAFT GEAR REMOVER PLATE
	J 23129 FRONT COVER OIL SEAL PULLER (2 required and used with J 1859-03)
	J 23523-E HARMONIC BALANCER REMOVER & INSTALLER (Use with J 21052-8 Adapter 260 C.I.D. & 350 C.I.D. only) (Featured on page 105)
	J 23600-B V-BELT TENSION GAUGE (Featured on page 86)
	J 24086-B PISTON PIN REMOVER & INSTALLER SET (Featured on page 84)
	J 25264-A CRANKSHAFT FRONT COVER OIL SEAL INSTALLER
	J 25285 CRANKSHAFT REAR MAIN SEAL INSTALLER (All except 455 C.I.D.)

	J 25286 REAR MAIN BEARING UPPER OIL SEAL PACKER (260 C.I.D. & 350 C.I.D. only)
	J 25287 CRANKSHAFT GEAR PULLER (Use with J 21052-8 260 C.I.D. & 350 C.I.D. only)
	J 25288 HARMONIC BALANCER INSTALLER (3/4" thread 260 C.I.D. & 350 C.I.D. only)
	J 25289 VALVE STEM HEIGHT GAUGE
	J 28428-D BLACK LIGHT LEAK DETECTOR (Includes 6-1 oz. containers or fluorescent oil additive) (Featured on page 84)
	J 28693 REAR MAIN BEARING OIL SEAL INSTALLER (455 C.I.D. only)
	J 29368-A REAR MAIN BEARING UPPER OIL SEAL PACKER (455 C.I.D. only)

20 MANUFACTURED BY OLDSMOBILE

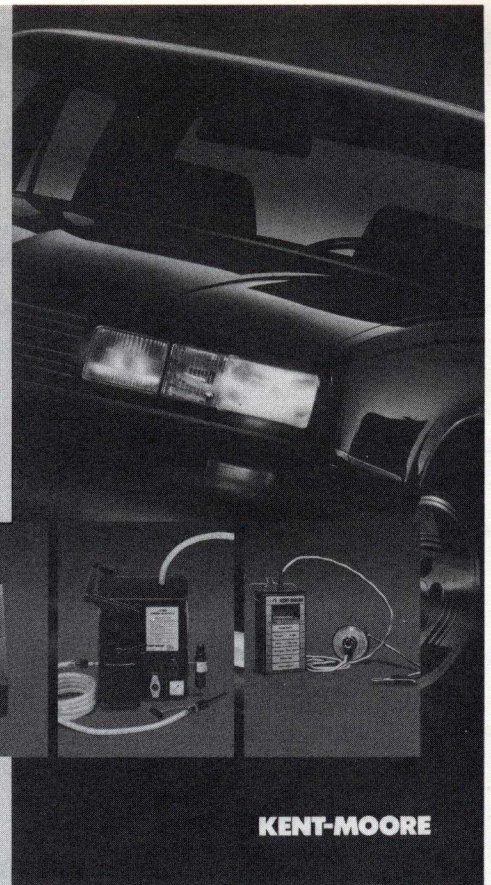
V-8 307, 350, 400 & 455 C.I.D. PONTIAC²¹

	J 5239 CONNECTING ROD BOLT GUIDE SET (3/8"-24)
	J 6978-E HARMONIC BALANCER REMOVER
	J 8062 VALVE SPRING COMPRESSOR (Head-off) (Featured on page 90)

	J 8080 MAIN BEARING SHELL REMOVER & INSTALLER
	J 8089 CARBON REMOVING BRUSH (Cast-Iron heads)
	J 8101 VALVE GUIDE CLEANER

21 MANUFACTURED BY PONTIAC

GENERAL
MOTORS
SPECIAL
SERVICE
TOOLS
1990-91
EDITION



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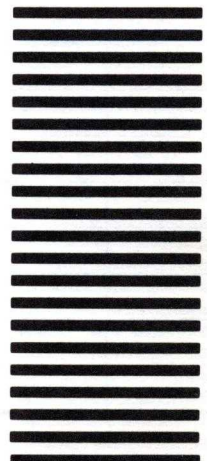
PERMIT NO. 14

ROSEVILLE, MICHIGAN

POSTAGE WILL BE PAID BY ADDRESSEE

ATTENTION: ORDER DEPARTMENT

**Kent-Moore
SPX Corporation
29784 Little Mack
Roseville, MI 48066-9984**





Please Print or Type Clearly to Avoid Delays and Errors

1. Ordered By:

Name _____

Street Address

City

State

Zip Code

Phone number where you can be reached during the day

2. Ship To: *(Only if different than ordered by).*

Name _____

Street Address

City

State

Zip Code: _____

3. Payment Information:

☐ C.O.D.

☐ Check or Money Order
*Contact Kent-Moore
for Freight charges.

☐ Open Account (on approved credit)

☐ Charge to Credit Card Below— Order Subject to Confirmation by Kent-Moore

☐ VISA☐ MASTERCARD Expiration Date:

Enter Credit Card Number in boxes provided below

[illegible]

Authorized
Credit Card
Signature _____

THIS SPACE FOR ORDER DEPARTMENT
USE ONLY

CUSTOMER	HOW 420	WHO	TYPE
CUST PO	EXEM Y N	VIA	TRANS 1 - 2

Please Print or Type Clearly to Avoid Delays and Errors

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Prices are in U.S. Dollars and are subject to change without notice. Will ship UPS when possible.

A. Total for Merchandise \$

SALES TAX

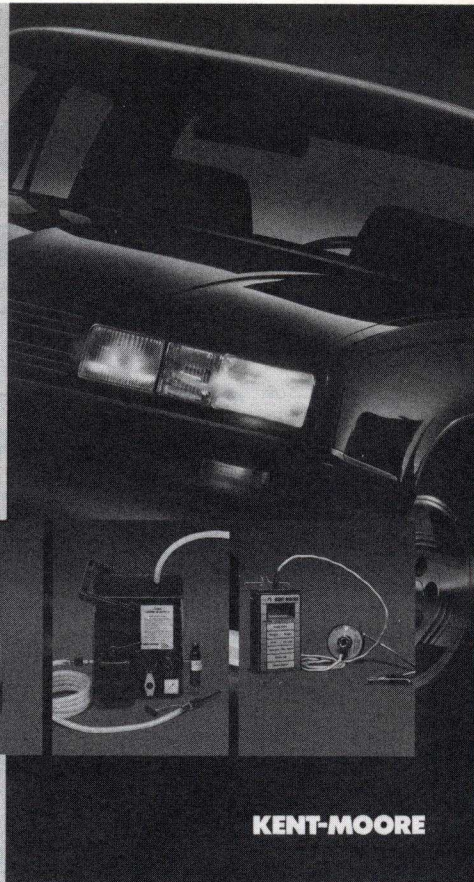
B. All states add tax, except Alaska, Delaware, Hawaii, Montana, New Hampshire, Oregon, Washington D.C. \$

TOTAL ORDER

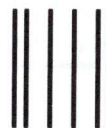
5. Total does not include delivery charges. Actual delivery charges will be added to invoice.

Make check payable to:
KENT-MOORE

GENERAL
MOTORS
SPECIAL
SERVICE
TOOLS
1990-91
EDITION



This order form is a self-mailer. Fold
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No
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United States

BUSINESS REPLY MAIL

FIRST CLASS

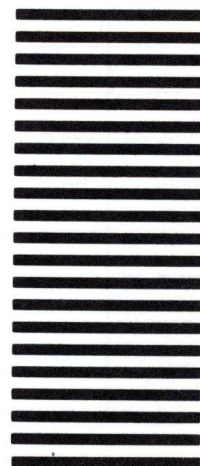
PERMIT NO. 14

ROSEVILLE, MICHIGAN

POSTAGE WILL BE PAID BY ADDRESSEE

ATTENTION: ORDER DEPARTMENT

Kent-Moore
SPX Corporation
29784 Little Mack
Roseville, MI 48066-9984





Please Print or Type Clearly to Avoid Delays and Errors

1. Ordered By:

Name: _____

Street Address

City

State

Zip Code

Phone number where you can be reached during the day

2. Ship To: *(Only if different than ordered by).*

Name _____

Street Address

City

State

Zip Code

3. Payment Information:

☐ C.O.D.

☐ Check or Money Order
*Contact Kent-Moore
for Freight charges.

☐ Open Account (on approved credit)

☐ Charge to Credit Card Below— Order Subject to Confirmation by Kent-Moore

☐ MASTERCARD Expiration Date:

Enter Credit Card Number in boxes provided below

[illegible]

Authorized
Credit Card
Signature _____

THIS SPACE FOR ORDER DEPARTMENT
USE ONLY

CUSTOMER	HOW 420	WHO	TYPE
CUST PO	EXEM Y N	VIA	TRANS 1 - 2

Please Print or Type Clearly to Avoid Delays and Errors

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Prices are in U.S. Dollars and are subject to change without notice. Will ship UPS when possible.

A. Total for Merchandise	\$
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SALES TAX

B. All states add tax, except Alaska, Delaware, Hawaii, Montana, New Hampshire, Oregon, Washington D.C. **\$**



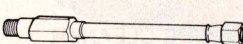
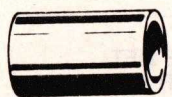

TOTAL ORDER

5. Total does not include delivery charges. Actual delivery charges will be added to invoice. \$

Make check payable to:
KENT-MOORE

GAS ENGINE - MECHANICAL

V-8 307, 350, 400 & 455 C.I.D. PONTIAC²¹ (CONTINUED)

	J 21526 REAR MAIN BEARING UPPER OIL SEAL PACKER
	J 22330 VALVE STEM SEAL INSTALLER & TESTER
	J 22794 SPARK PLUG PORT ADAPTER (14mm with gasket)
	J 22875 TIMING CHAIN COVER SEAL INSTALLER
	J 22965 PISTON RING COMPRESSOR (350 C.I.D. only - 3.8" dia.)

21 MANUFACTURED BY PONTIAC

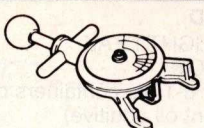
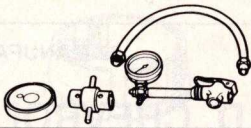

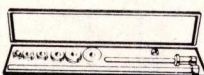
V-8 350 C.I.D. (5.7L) BUICK²²



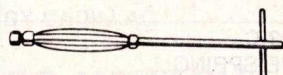

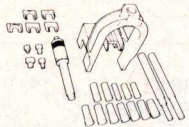
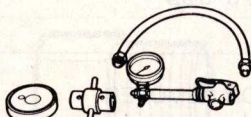
J 21526 REAR MAIN BEARING UPPER SEAL PACKER

J 21526 is required to pack the rear main bearing upper rope seal on the Buick 350, 455 V-8 & 3.8, 4.1L V-6 engines.



	J 8062 VALVE SPRING COMPRESSOR (Head-off) (Featured on page 90)
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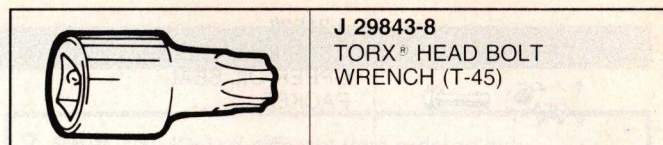
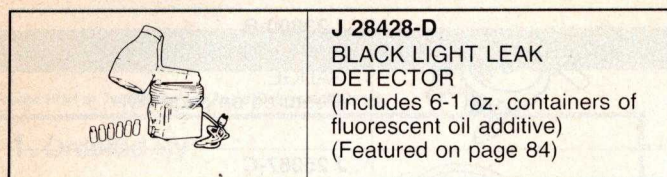
	J 23600-B V-BELT TENSION GAUGE (Featured on page 86)
	J 25087-C OIL PRESSURE TESTER & OIL PUMP PRIMER (Featured on page 88)
	J 28428-D BLACK LIGHT LEAK DETECTOR (Includes 6-1 oz. containers of fluorescent oil additive) (Featured on page 84)
	J 33049 CAMSHAFT BEARING REMOVER & INSTALLER (Featured on page 107)

	J 8080 MAIN BEARING SHELL REMOVER & INSTALLER
	J 8089 CARBON REMOVING BRUSH (Cast-Iron heads)
	J 8101 VALVE GUIDE CLEANER
	J 22965 PISTON RING COMPRESSOR (3.8" dia.)
	J 24086-B PISTON PIN REMOVER & INSTALLER SET (Featured on page 84)
	J 25087-C OIL PRESSURE TESTER & OIL PUMP PRIMER (Featured on page 88)

22 MANUFACTURED BY BUICK

GAS ENGINE - MECHANICAL

V-8 350 C.I.D. (5.7L) BUICK²² (CONTINUED)

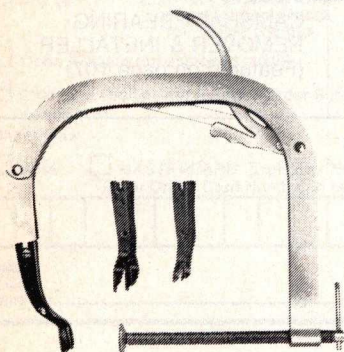


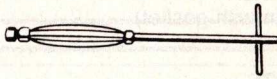
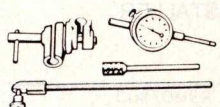
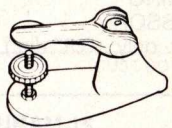
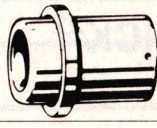
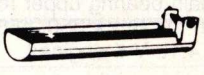
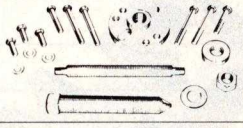

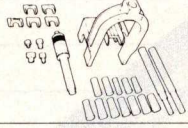


22 MANUFACTURED BY BUICK

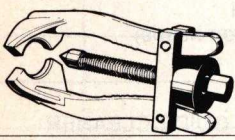

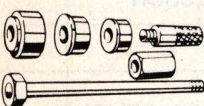
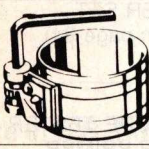

V-8 366, 396, 454 C.I.D. CHEVROLET MARK²³

J 8062 VALVE SPRING COMPRESSOR

This universal valve spring compressor locks with the valve spring compressed, exposing the valve keys for easy removal. (Head off)



	J 8101 VALVE GUIDE CLEANER
	J 8520 CAM LOBE LIFT INDICATOR
	J 9666 VALVE SPRING TESTER
	J 22102 FRONT COVER OIL SEAL INSTALLER
	J 22144 OIL INLET TUBE INSTALLER
	J 23523-E HARMONIC BALANCER REMOVER & INSTALLER (Featured on page 105)
	J 23590 SPARK PLUG PORT ADAPTER (14mm tapered seat)
	J 24086-B PISTON PIN REMOVER & INSTALLER SET (Featured on page 84)
	J 28428-D BLACK LIGHT LEAK DETECTOR (Includes 6-1 oz. containers of fluorescent oil additive) (Featured on page 84)
	J 28431-B FLUORESCENT OIL ADDITIVE (24-1 oz. containers)

	J 1619 TIMING GEAR PULLER
	J 5892-C VALVE SPRING COMPRESSOR (Head-on)
	J 6098-01 CAMSHAFT BEARING REMOVER & INSTALLER
	J 8037 PISTON RING COMPRESSOR (2 1/8" to 5" dia.)
	J 8089 CARBON REMOVER BRUSH (All Cast-Iron heads)

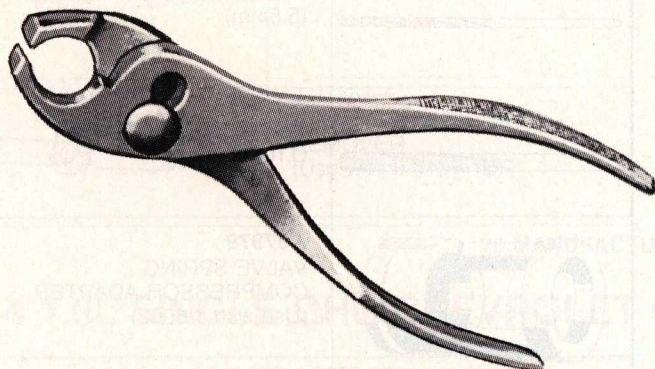
23 MANUFACTURED BY CHEVROLET


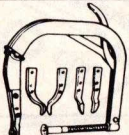
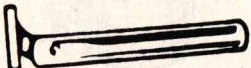
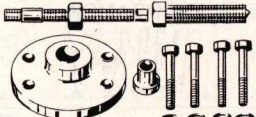
GAS ENGINE - MECHANICAL

V-8 472, 500 C.I.D. & 6.0L CADILLAC²⁴

J 3049 HYDRAULIC VALVE LIFTER REMOVER

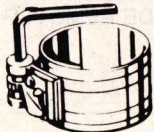
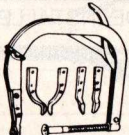
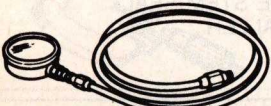
This plier type device grips the outside diameter of the hydraulic valve lifter body without damaging the lifter.



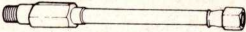

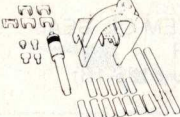





	J 3074 HYDRAULIC VALVE LIFTER TESTER
	J 8062 VALVE SPRING COMPRESSOR (Head-off)
	J 8080 MAIN BEARING SHELL REMOVER & INSTALLER
	J 21052-02 HARMONIC BALANCER REMOVER & INSTALLER

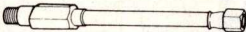
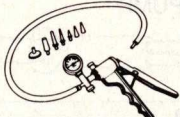
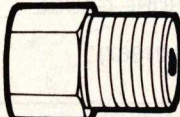
24 MANUFACTURED BY CADILLAC

L-3 1.0L SINGLE OHC CHEVROLET (GEO METRO)²⁵

	J 8037 PISTON RING COMPRESSOR
	J 8062 VALVE SPRING COMPRESSOR (Featured on page 90)
	J 21867 OIL PRESSURE GAUGE

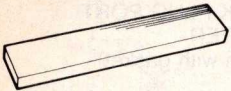
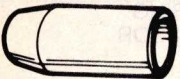
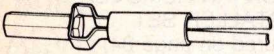

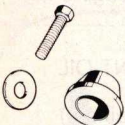
25 MANUFACTURED BY SUZUKI




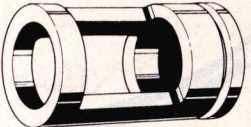
	J 22794 SPARK PLUG PORT ADAPTER (14mm with gasket)
	J 22965 PISTON RING COMPRESSOR (3.8" dia.)
	J 24086-B PISTON PIN REMOVER & INSTALLER SET (Featured on page 84)
	J 28428-D BLACK LIGHT LEAK DETECTOR (Includes 6-1 oz. containers of fluorescent oil additive) (Featured on page 84)
	J 28431-B FLUORESCENT OIL ADDITIVE (24-1 oz. containers)
	J 29545 FLUORESCENT COOLANT ADDITIVE (24-1 oz. containers)
	J 33049 CAMSHAFT BEARING REMOVER & INSTALLER (Featured on page 107)
	J 38606 VALVE SPRING COMPRESSOR (Head-on) (Supersedes J 26513-A)

	J 22794 COMPRESSION GAUGE ADAPTER
	J 23738-A VACUUM PUMP
	J 25695-10 OIL PRESSURE GAUGE ADAPTER (Use with J 21867)

GAS ENGINE - MECHANICAL

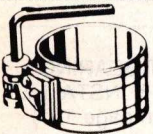
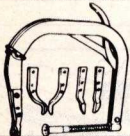
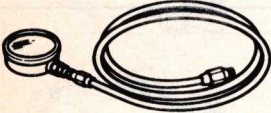
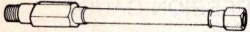
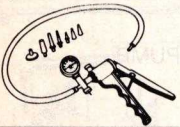
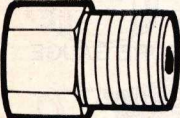
L-3 1.0L SINGLE OHC CHEVROLET (GEO METRO)²⁵ (CONTINUED)

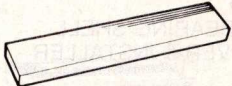


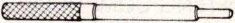
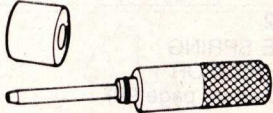

	J 34673 STRAIGHT EDGE
	J 34853 CRANKSHAFT OIL SEAL GUIDE
	J 37281-A VALVE STEM OIL SEAL REMOVER (Use with J 6125-1B)
	J 37747 CRANKSHAFT FRONT OIL SEAL INSTALLER
	J 37748 CAMSHAFT SEAL INSTALLER

	J 37968 VALVE GUIDE SEAL INSTALLER KIT
	J 37971 VALVE GUIDE REAMER (5.5mm)
	J 37972 VALVE GUIDE REAMER (11mm)
	J 37979 VALVE SPRING COMPRESSOR ADAPTER (Use with J 8062)

25 MANUFACTURED BY SUZUKI

L-4 1.6L SINGLE OHC CHEVROLET (GEO TRACKER)²⁶

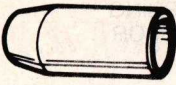
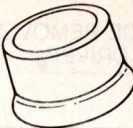
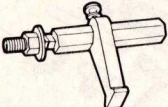
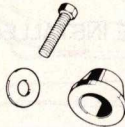
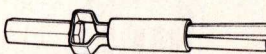
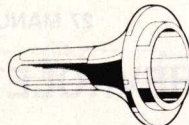
	J 8037 PISTON RING COMPRESSOR
	J 8062 VALVE SPRING COMPRESSOR (Featured on page 90)
	J 21867 OIL PRESSURE GAUGE 0-300 psi
	J 22794 COMPRESSION GAUGE ADAPTER
	J 23738-A VACUUM PUMP
	J 25695-10 OIL PRESSURE GAUGE ADAPTER (Use with J 21867)

	J 34673 STRAIGHT EDGE
	J 34831 VALVE GUIDE REAMER
	J 34832 VALVE GUIDE REAMER
	J 34833 VALVE GUIDE REMOVER
	J 34834 VALVE GUIDE INSTALLER
	J 34835 VALVE STEM SEAL INSTALLER

26 MANUFACTURED BY SUZUKI

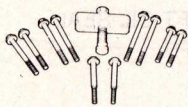
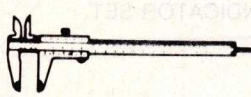
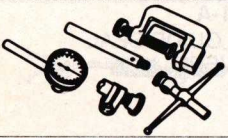

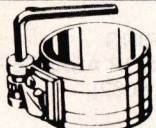
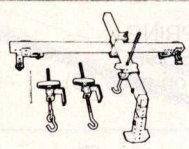
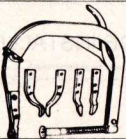
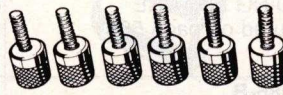

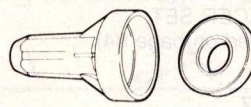
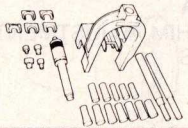
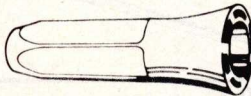
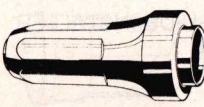
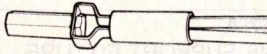
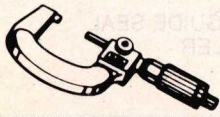
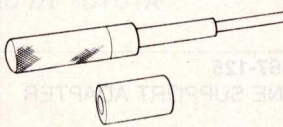
GAS ENGINE - MECHANICAL

L-4 1.6L SINGLE OHC CHEVROLET (GEO TRACKER)²⁶ (CONTINUED)

	J 34853 CRANKSHAFT OIL SEAL GUIDE		J 37747 CRANKSHAFT FRONT SEAL INSTALLER
	J 35271 FLYWHEEL HOLDER		J 37748 CAMSHAFT SEAL INSTALLER
	J 37281-A VALVE STEM OIL SEAL REMOVER (Use with J 6125-1B)		J 37749 CRANKSHAFT REAR SEAL INSTALLER

26 MANUFACTURED BY SUZUKI

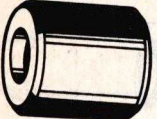
L-4 1.6L SINGLE OHC CHEVROLET (GEO STORM)²⁷

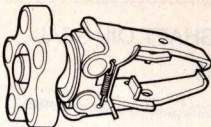
	J 1859-03 CRANKSHAFT PULLEY PULLER		J 26900-5 DIAL CALIPER
	J 8001 DIAL INDICATOR SET		J 26900-9 FEELER GAUGE
	J 8037 PISTON RING COMPRESSOR		J 28467-A ENGINE SUPPORT FIXTURE (Featured on page 83)
	J 8062 VALVE SPRING COMPRESSOR (Featured on page 90) (Head off)		J 28467-125 ENGINE SUPPORT ADAPTER KIT
	J 8614-01 CRANKSHAFT PULLEY HOLDING FIXTURE (Featured on page 59)		J 35264 REAR MAIN SEAL INSTALLER
	J 24086-B PISTON PIN REMOVER AND REPLACER SET (Featured on page 84)		J 35268 CAMSHAFT OIL SEAL INSTALLER
	J 25337 OIL PUMP SEAL INSTALLER		J 37281 VALVE GUIDE SEAL INSTALLER
	J 26900-2 OUTSIDE MICROMETER		J 37985 VALVE GUIDE INSTALLER

27 MANUFACTURED BY ISUZU

GAS ENGINE - MECHANICAL

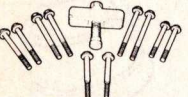


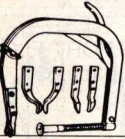
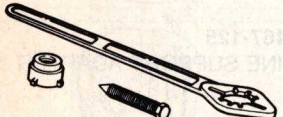
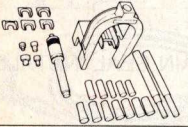
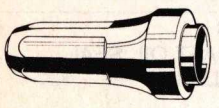
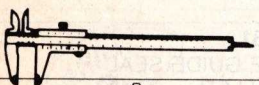
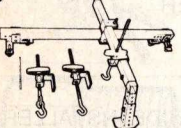
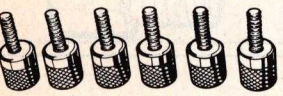
L-4 1.6L SINGLE OHC CHEVROLET (GEO STORM)²⁷ (CONTINUED)

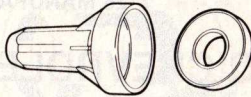
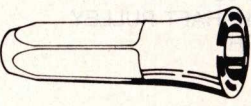
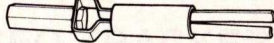

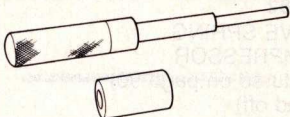

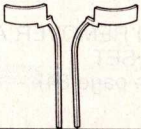
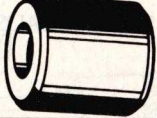

	J 37985-1 VALVE GUIDE REMOVER & INSTALLER DRIVER
	J 38462 VALVE GUIDE INSTALLER

	J 38606 VALVE SPRING COMPRESSOR
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27 MANUFACTURED BY ISUZU

L-4 1.6L DUAL OHC CHEVROLET (GEO STORM)²⁸

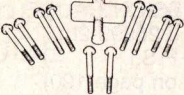

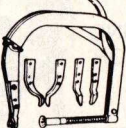
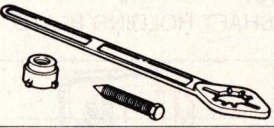
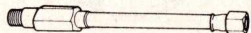

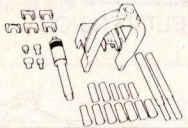
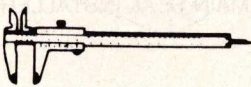
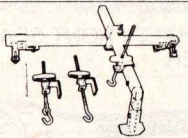
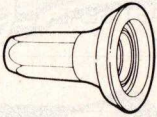
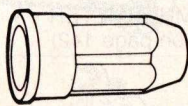
	J 1859-03 CRANKSHAFT PULLEY PULLER
	J 8001 DIAL INDICATOR SET
	J 8037 PISTON RING COMPRESSOR
	J 8062 VALVE SPRING COMPRESSOR (Featured on page 90) (Head-off)
	J 8614-01 CRANKSHAFT PULLEY HOLDING FIXTURE (Featured on page 59)
	J 24086-B PISTON PIN REMOVER AND REPLACER SET (Featured on page 84)
	J 25337 OIL PUMP SEAL INSTALLER
	J 26900-5 DIAL CALIPER
	J 28467-A ENGINE SUPPORT FIXTURE (Featured on page 83)
	J 28467-125 ENGINE SUPPORT ADAPTER KIT

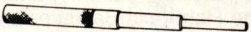
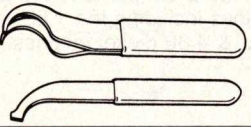
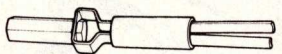



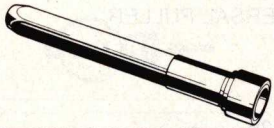

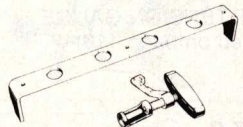
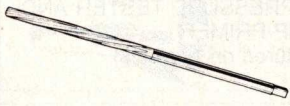
	J 35264 REAR MAIN SEAL INSTALLER
	J 35268 CAMSHAFT OIL SEAL INSTALLER
	J 37281-A VALVE GUIDE SEAL REMOVER
	J 37979-A VALVE SPRING COMPRESSOR ADAPTER (Use with J 8062)
	J 37985 VALVE GUIDE INSTALLER
	J 37985-1 VALVE GUIDE REMOVER & INSTALLER DRIVER
	J 38413-A VALVE SHIM ADJUSTMENT SPACERS
	J 38462 VALVE GUIDE INSTALLER ADAPTER
	J 38537 VALVE GUIDE SEAL INSTALLER

28 MANUFACTURED BY ISUZU

GAS ENGINE - MECHANICAL

L-4 1.6L DUAL OHC CHEVROLET (GEO PRIZM)²⁹

	J 1859-03 CRANKSHAFT PULLEY PULLER
	J 8001 DIAL INDICATOR
	J 8062 VALVE SPRING COMPRESSOR (Featured on page 90) (Head-off)
	J 8614-01 CRANKSHAFT PULLEY HOLDER (Featured on page 59)
	J 22794 SPARK PLUG PORT ADAPTER
	J 23907 SLIDE HAMMER
	J 24086-B PISTON PIN REMOVER AND REPLACER SET (Featured on page 84)
	J 26900-5 VERNIER CALIPERS
	J 28467-A UNIVERSAL SUPPORT FIXTURE (Featured on page 83)
	J 35388 REAR MAIN SEAL INSTALLER
	J 35403 OIL PUMP SEAL INSTALLER

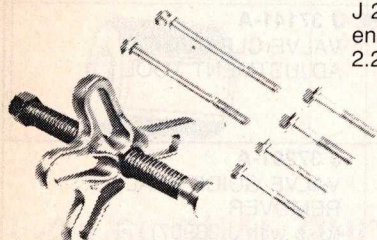
	J 37133 VALVE GUIDE BUSHING REMOVER AND INSTALLER
	J 37141-A VALVE CLEARANCE ADJUSTMENT TOOL
	J 37281-A VALVE GUIDE SEAL REMOVER (Use with J 23907)
	J 37755 GUIDE SEAL PULLER Updates J 37281 to J 37281-A
	J 37972 11MM VALVE GUIDE REAMER
	J 37979-A SPRING COMPRESSOR ADAPTER (Use with J 8062)
	J 38232 VALVE GUIDE SEAL INSTALLER
	J 38277 VALVE GUIDE INST. ADAPTER
	J 38279 ON-VEHICLE VALVE SPRING COMPRESSOR W/ADAPTER
	J 38342 6MM VALVE STEM REAMER

29 MANUFACTURED BY TOYOTA

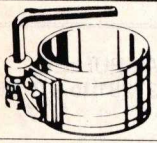

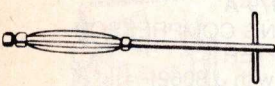
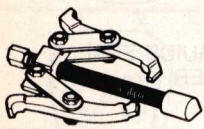
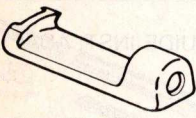
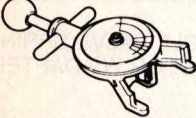
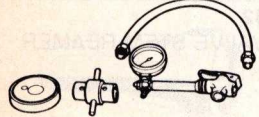
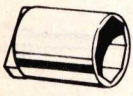
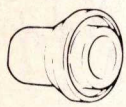

DIESEL ENGINE - MECHANICAL






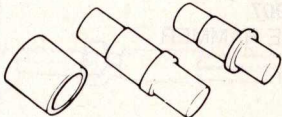
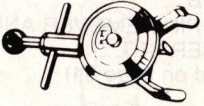
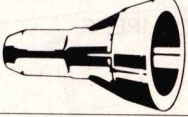
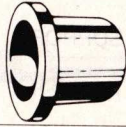
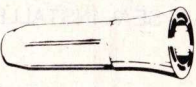

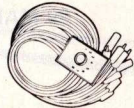
1.8 LITER

J 24420-B HARMONIC BALANCER REMOVER



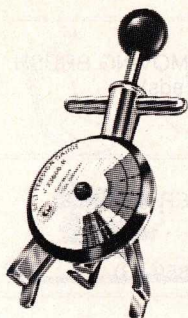
This puller fits the bolt pattern of the Harmonic Balancer and includes the necessary hardware for removal. J 24420-B adapts to many GM engines including the 1.8L, 2.2L, & 4.3L diesel engines.

	J 8037 PISTON RING COMPRESSOR (2 1/8" to 5" dia.)
	J 8089 CARBON REMOVING BRUSH (Cast Iron Heads)
	J 8101 VALVE GUIDE CLEANER
	J 22888-20 UNIVERSAL PULLER
	J 23129 FRONT COVER SEAL REMOVER (2 Req'd) (Use with J 24420-B)
	J 23600-B V-BELT TENSION GAUGE (Featured on page 119)
	J 25087-C OIL PRESSURE TESTER AND PUMP PRIMER (Featured on page 88)
	J 25510 ENGINE MOUNT SOCKET
	J 26587 FRONT COVER OIL SEAL INSTALLER
	J 26925 MAG-TAC ENGINE TACHOMETER

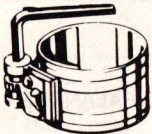

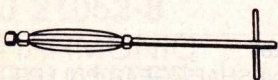
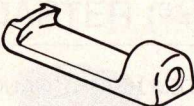



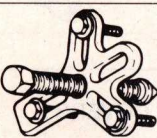
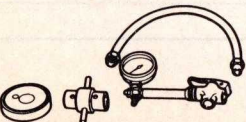
	J 26999 COMPRESSION GAUGE (Use with J 26999-20) 0 to 1000 P.S.I. (Featured on page 120)
	J 26999-20 COMPRESSION GAUGE ADAPTER (Use with J 26999)
	J 29760 VALVE SPRING COMPRESSOR
	J 29761 CAMSHAFT HOLDING PLATE
	J 29763 STATIC TIMING GAUGE
	J 29765 CONNECTING ROD BUSHING REMOVER & INSTALLER
	J 29771-A TIMING BELT TENSION GAUGE
	J 29818 REAR MAIN SEAL INSTALLER
	J 33182 CRANKSHAFT FRONT SEAL INSTALLER
	J 33183 CRANKSHAFT SEAL INSTALLER
	J 34029-A DIGITAL MULTIMETER (Featured on page 142)
	J 34116 CYLINDER BALANCE TESTER (Use with J 34029-A)

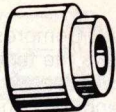
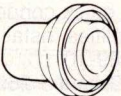





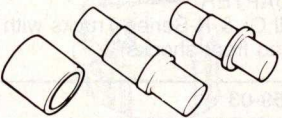
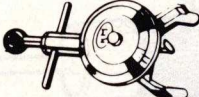
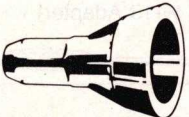
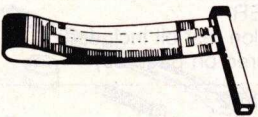


2.2 LITER

J 23600-B V-BELT TENSION GAUGE



Proper belt tension eliminates slippage and increases efficiency of belt driven components in addition to ensuring maximum belt and bearing life. J 23600-B sets belt tension quickly and accurately with a range of 30 to 180 lbs/130-800 newtons.

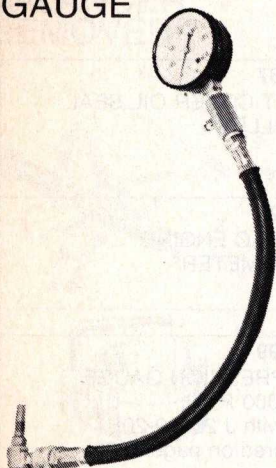
	J 8037 PISTON RING COMPRESSOR (2 1/8" to 5")
	J 8089 CARBON REMOVING BRUSH (Cast Iron heads)
	J 8101 VALVE GUIDE CLEANER
	J 23129 FRONT COVER SEAL REMOVER (2 Req'd) (Use with J 24420-B)
	J 23907 CLUTCH PILOT BEARING REMOVER (Featured on page 156)
	J 24250 FRONT CRANKSHAFT SEAL INSTALLER
	J 24254 CAMSHAFT SEAL INSTALLER
	J 24420-B HARMONIC BALANCER REMOVER (Featured on page 118)
	J 25087-C OIL PRESSURE TESTER AND PUMP PRIMER (Featured on page 88)

	J 26516-A PILOT BEARING INSTALLER
	J 26587 FRONT COVER OIL SEAL INSTALLER
	J 26925 MAG-TAC ENGINE TACHOMETER
	J 26999 COMPRESSION GAUGE 0 to 1000 P.S.I. (Use with J 26999-20) (Featured on page 120)
	J 26999-20 COMPRESSION GAUGE ADAPTER (Use with J 26999)
	J 29760 VALVE SPRING COMPRESSOR
	J 29763 STATIC TIMING GAUGE
	J 29765 CONNECTING ROD BUSHING REMOVER & INSTALLER
	J 29771-A TIMING BELT TENSION GAUGE
	J 29818 REAR MAIN OIL SEAL INSTALLER
	J 29927 OIL FILTER WRENCH
	J 34029-A DIGITAL MULTIMETER (Featured on page 142)
	J 34116 CYLINDER BALANCE TESTER (Use with J 34029-A)

DIESEL ENGINE - MECHANICAL

4.3 LITER

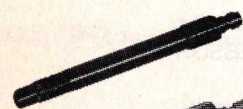
J 26999 COMPRESSION GAUGE



The J 26999 Compression Gauge allows the technician to measure cylinder compression on diesel engines. The gauge measures 0-1000 P.S.I. and features a quick connect fitting which simplifies installation. The J 26999-10, J 26999-20, and J 26999-30 adapters are required to measure cylinder compression on 6.2L & 1.8L/2.2L diesel engines. J 26999-1 4.3L & 5.7L Compression Gauge Adapter is included with J 26999.



J 26999-1
4.3L & 5.7L COMPRESSION
GAUGE ADAPTER
(INCLUDED WITH J 26999)



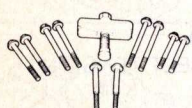
J 26999-10
6.2L COMPRESSION GAUGE
ADAPTER



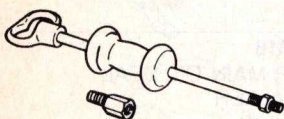
J 26999-20
1.8L/2.2L COMPRESSION
GAUGE ADAPTER



J 26999-30
6.2L COMPRESSION GAUGE
ADAPTER
(All G- & K-Series Trucks with
quad front shocks)



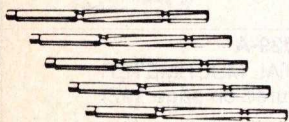
J 1859-03
FRONT COVER SEAL
REMOVER
(Use with J 23129)



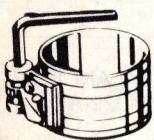
J 2619-01
HEAVY DUTY SLIDE HAMMER
(5/8-18 with 1/2-13 Adapter)



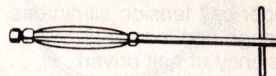
J 5790-B
HYDRAULIC VALVE LIFTER
TESTER
(1 Gallon test oil included)
(Featured on page 89)



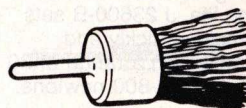
J 5830-02
VALVE GUIDE REAMER SET
(1 1/32", .003" to .030" O.S.)



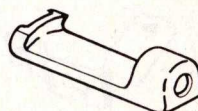
J 8037
PISTON RING COMPRESSOR
(2 1/8" to 5")



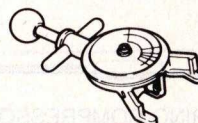
J 8101
VALVE GUIDE CLEANER



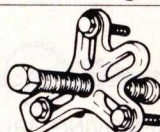
J 8358
CARBON REMOVING BRUSH
(Aluminum heads)



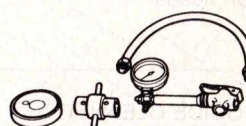
J 23129
FRONT COVER SEAL
REMOVER
(2 Req'd)
(Use with J 1859-03)



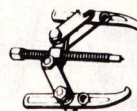
J 23600-B
V-BELT TENSION GAUGE
(Featured on page 119)



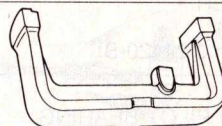
J 24420-B
HARMONIC BALANCER
PULLER
(Featured on page 118)



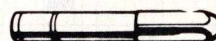
J 25087-C
OIL PRESSURE TESTER AND
PUMP PRIMER
(Featured on page 88)



J 25287
CRANKSHAFT GEAR PULLER



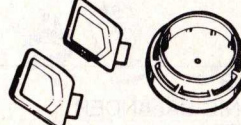
J 25289
VALVE STEM HEIGHT GAUGE



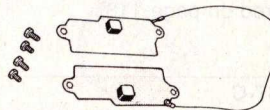
J 26251
VALVE SEAL INSTALLER



J 26925
MAG-TAC ENGINE
TACHOMETER

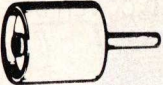
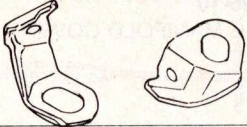
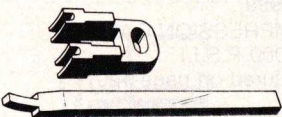
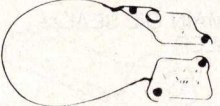



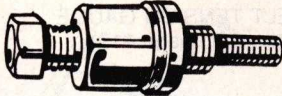
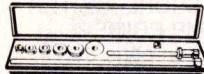


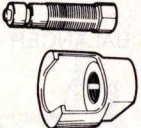
J 26996
MANIFOLD COVER SET



J 26996-10
MANIFOLD COVERS
(1985 only)

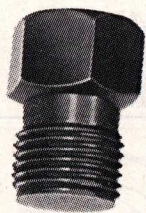
4.3 LITER (CONTINUED)

	J 28425 PUMP ADAPTER SEAL INSTALLER
	J 28467-45 ENGINE LIFTING HOOKS (A-car only) Use with J 28467-A
	J 29368-A REAR MAIN OIL SEAL PACKER
	J 29657 MANIFOLD COVERS (Thru 84)
	J 29659-A FRONT COVER OIL SEAL INSTALLER

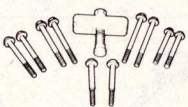
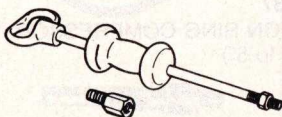

	J 29786 WATER PUMP PULLEY INSTALLER
	J 33049 CAMSHAFT BEARING REMOVER & INSTALLER
	J 34029-A DIGITAL MULTIMETER (Featured on page 142)
	J 34116 CYLINDER BALANCE TESTER (Use with J 34029-A)
	J 34689 WATER PUMP PULLEY REMOVER

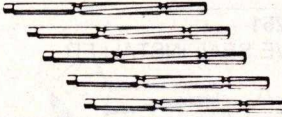


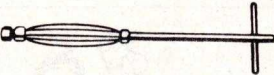
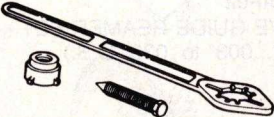
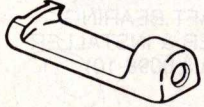
5.7 LITER

J 21052-8 HARMONIC BALANCER REMOVER ADAPTER (3/4")



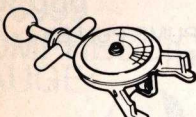
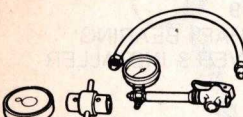
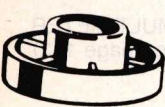


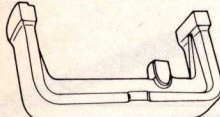
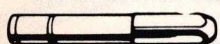
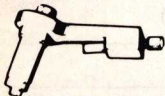

This adapter threads into the crankshaft and allows the Harmonic Balancer to be removed with a remover such as J 8614-01 or J 23523-E. This adapter is required on 5.7L diesel and 260, 350, and 455 CID gas engines.

	J 1859-03 FRONT COVER SEAL REMOVER (Use with J 23129)
	J 2619-01 HEAVY DUTY SLIDE HAMMER (5/8-18 with 1/2-13 adapter)
	J 5790-B HYDRAULIC VALVE LIFTER TESTER (Includes 1 gallon of test oil) (Featured on page 89)

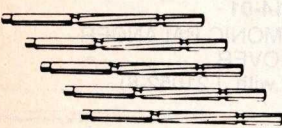
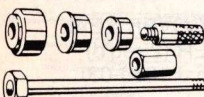
	J 5830-02 VALVE GUIDE REAMER SET (1/32", .003" to .030" O.S.)
	J 8037 PISTON RING COMPRESSOR (2 1/8" to 5")
	J 8089 CARBON REMOVING BRUSH (Cast Iron heads)
	J 8101 VALVE GUIDE CLEANER (Universal)
	J 8614-01 HARMONIC BALANCER REMOVER (Use with J 21052-8)
	J 23129 FRONT COVER SEAL REMOVER (2 req'd) (Use with J 1859-03)


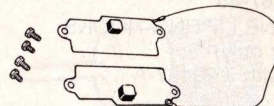

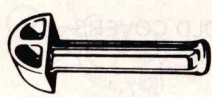
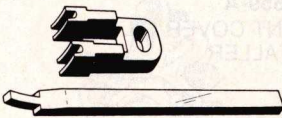
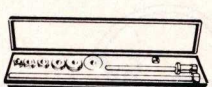


DIESEL ENGINE - MECHANICAL


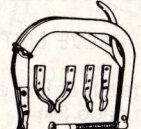
5.7 LITER (CONTINUED)

	J 23600-B V-BELT TENSION GAUGE (Featured on page 119)
	J 25087-C OIL PRESSURE TESTER AND PUMP PRIMER (Featured on page 88)
	J 25264-A FRONT COVER SEAL INSTALLER
	J 25287 CRANKSHAFT GEAR PULLER
	J 25288 HARMONIC BALANCER INSTALLER
	J 25289 VALVE STEM HEIGHT GAUGE
	J 26251 VALVE SEAL INSTALLER
	J 26896 STATIC TIMING GAUGE
	J 26925 MAG-TAC ENGINE TACHOMETER

6.2 LITER


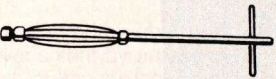
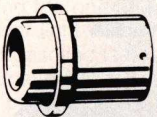
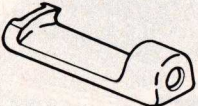
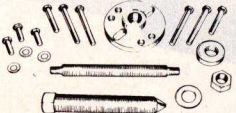

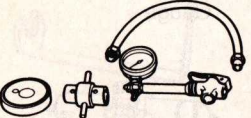
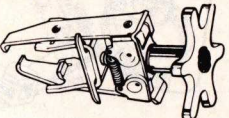




	J 5830-02 VALVE GUIDE REAMER SET ($1\frac{1}{32}$ ", .003" to .030" O.S.)
	J 6098-01 CAMSHAFT BEARING REMOVER & INSTALLER (Use with J 6098-10)

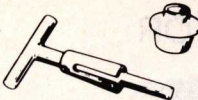

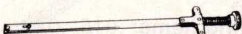

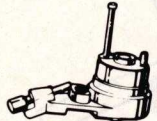
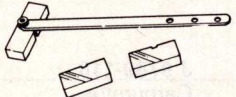
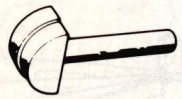
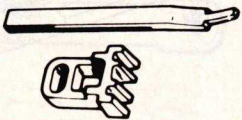
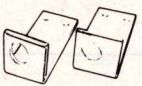

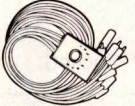
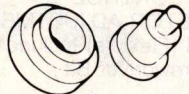
	J 26996 MANIFOLD COVER SET
	J 26996-10 INTAKE MANIFOLD COVERS
	J 26999 COMPRESSION GAUGE (0-1000 P.S.I.) (Featured on page 120)
	J 28693 REAR MAIN OIL SEAL INSTALLER
	J 29368-A REAR MAIN OIL SEAL PACKER
	J 33049 CAM BEARING DRIVER
	J 34029-A DIGITAL MULTIMETER (Featured on page 142)
	J 34116 CYLINDER BALANCE TESTER (Use with J 34029-A)

	J 8037 PISTON RING COMPRESSOR ($2\frac{1}{8}$ " to 5")
	J 8062 VALVE SPRING COMPRESSOR (Head off)

DIESEL ENGINE - MECHANICAL

6.2 LITER (CONTINUED)

	J 8089 CARBON REMOVING BRUSH (Cast Iron Heads)
	J 8101 VALVE GUIDE CLEANER
	J 22102 FRONT COVER ALIGNER & SEAL INSTALLER
	J 23129 FRONT COVER SEAL REMOVER (Used with J 6125-1B)
	J 23523-E HARMONIC BALANCER REMOVER & INSTALLER
	J 23600-B V-BELT TENSION GAUGE (Featured on page 119)
	J 25087-C OIL PRESSURE TESTER AND PUMP PRIMER (Featured on page 88)
	J 26513-A VALVE SPRING COMPRESSOR (Head on)
	J 26925 MAG-TAC ENGINE TACHOMETER
	J 26999 COMPRESSION GAUGE 0-1000 P.S.I. (Use with J 26999-10 & -30) (Featured on page 120)
	J 26999-10 COMPRESSION GAUGE ADAPTER (Use with J 26999)
	J 26999-30 COMPRESSION GAUGE ADAPTER (Truck G & K- Series Truck with quad front shocks) (Use with J 26999)

	J 29134-B PISTON RETAINING RING INSTALLER
	J 29664 MANIFOLD COVER SET
	J 29834 HYDRAULIC VALVE LIFTER REMOVER
	J 29872 INJECTION PUMP ADJUSTING TOOL
	J 33042 STATIC TIMING GAUGE
	J 33043-A VACUUM VALVE GAUGE SET
	J 33153 REAR MAIN OIL SEAL INSTALLER
	J 33154 REAR MAIN UPPER SEAL PACKER
	J 33888 ENGINE LIFTING FIXTURE (G-Van only)
	J 34029-A DIGITAL MULTIMETER (Featured on page 142)
	J 34116 CYLINDER BALANCE TESTER (Use with J 34029-A)
	J 34140 PILOT BEARING INSTALLER

FUEL - GASOLINE

GENERAL CARBURETOR

J 9789-D

UNIVERSAL CARBURETOR GAUGE SET

The J 9789-D Universal Carburetor Gauge Set provides the most convenient and economical method of rapidly performing complete and efficient carburetor service. Easy to use, the set eliminates the need for you to purchase additional gauges every time you desire to service a different carburetor.

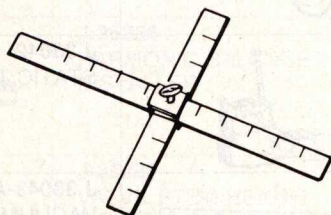
Assorted Gauges

The Gauge Set consists of the following items: .015, .020, .025, .030, .035, .040, .045, .050, .055, .060, .065, .070, .075, .080, .085, .090, .095, .100, .110, .120, .130, .140, .150, .160, .170, .180, .190, .200, .215, .230, .245, and .260 wire gauges, .275, .300, .325, .350, .375, .400, .450, and .500 plug gauges, .375, .400, .430, and .450 flat gauges.

SET INCLUDES:

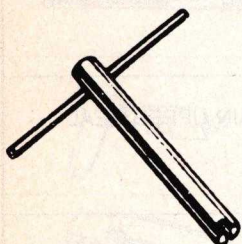
J 9789-90

Float Level T-Scale



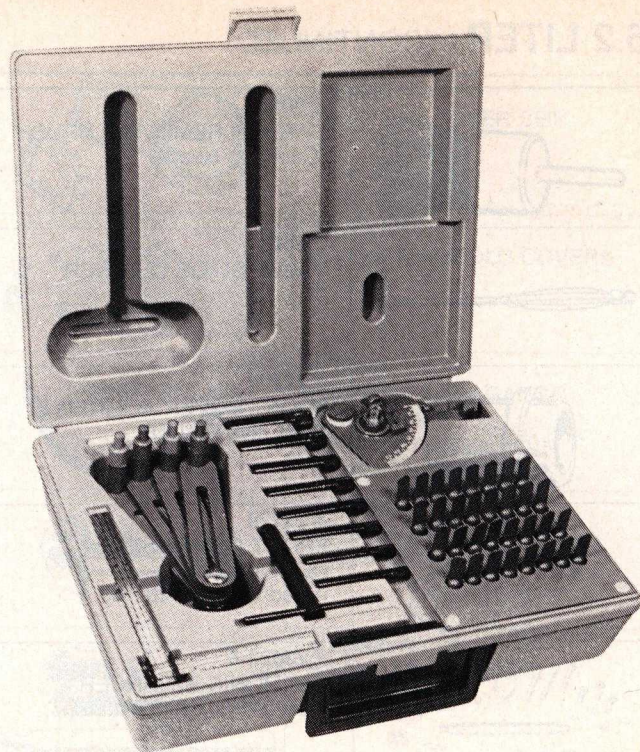
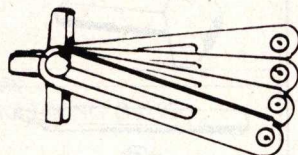
J 9789-111

Linkage Bending Tool



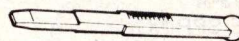
J 9789-118

Carburetor Stand



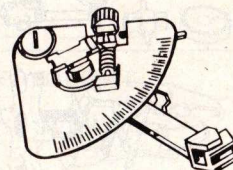
J 34935-130


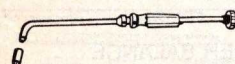

External Float Level Gauge (Black) (Includes 5)



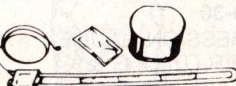


J 26701-A

Carburetor Choke Angle Gauge



	J 9789-84 .520 PLUG GAUGE (4.8L R&P Truck)
	J 22646-02 REMOTE CONTROL CARBURETOR ADJUSTMENT WRENCH (1/4" Drive) (Includes 1/4" Socket)
	J 22967-B REMOTE CONTROL CARBURETOR ADJUSTMENT WRENCH (Flexible) Includes 1/8" Hex & Screwdriver Bit

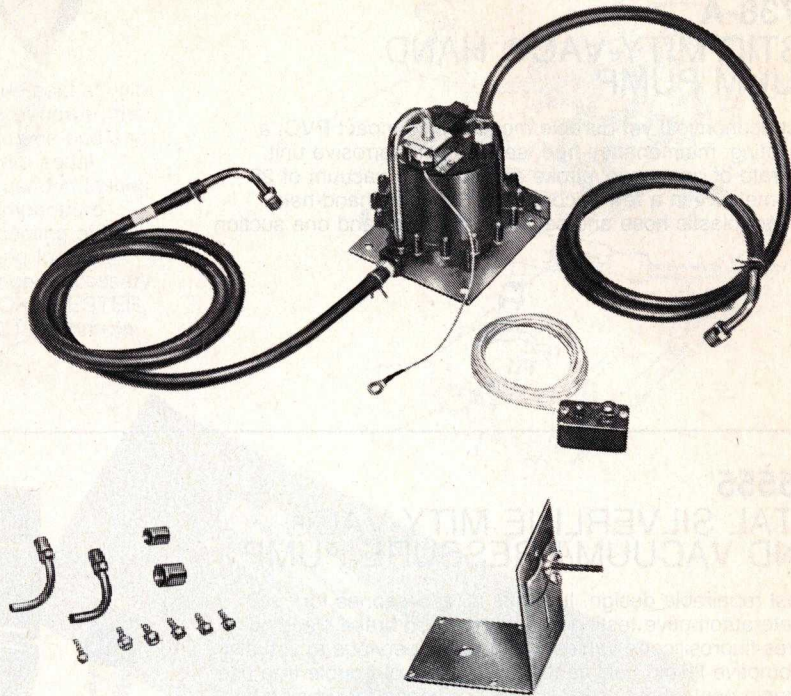
	J 22973-A THER-MAC AIR CLEANER THERMOMETER (60°F-160°F)
	J 23433 MULTIPLE CARBURETOR SYNCHRONIZER (All Dual Carburetor Systems)
	J 23951 CARBURETOR THROTTLE PLATE CALIBRATOR MANOMETER (All Dual Carburetor Systems and 1978-83 3.8L V-6 Turbo)

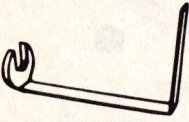
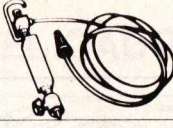

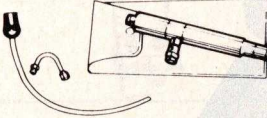
GENERAL CARBURETOR (CONTINUED)

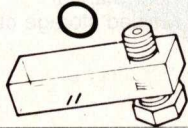
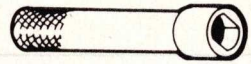
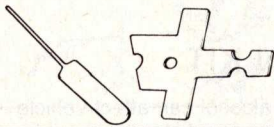
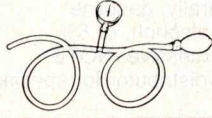
J 28690 GAS-PER MILE GAUGE

The J 28690 has been designed to provide a practical method of determining automotive gasoline consumption on all vehicles with engine mounted fuel pumps.

You control the operation of the unit from the driver's seat by an electrically controlled push-button switch. To start a test, simply push the button which energizes the sensor light telling the operator a test is in process. The sensor light will stay on until 1/10th of a gallon of gasoline is used. The test reservoir will automatically refill within 30 seconds after a test is completed. The J 28690 enables you to keep the device connected for an extended period of time by the use of a by-pass that diverts the fuel around the test reservoir during normal vehicle operation. This unit is complete with all necessary fittings, and complete instructions.

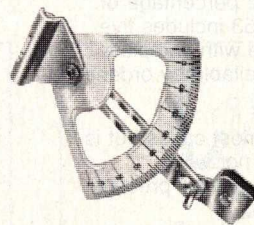


	J 26510 CARBURETOR WRENCH (Opel 1976-79)
	J 26911 PROPANE ENRICHMENT DEVICE
	J 28474 TURBO COMPOUND GAUGE (Buick-Chevrolet V-6)
	J 34024 CHOKE TESTER (Use with shop air) (0°-160°F) (Featured on page 127)

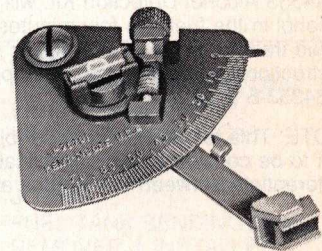
	J 34883 FLOAT LEVEL GAUGE Chevrolet Firefly
	J 34884 CARBURETOR IDLE MIXTURE ADJUSTER Chevrolet Sprint
	J 35554 THROTTLE PLATE ANGLE GAUGE Chevrolet Spectrum
	J 35691 TURBO CHARGER PRESSURE GAUGE (Sprint/Spectrum Turbo)

CHOKE ANGLE GAUGES

Carburetor choke angle adjustments must be set to angle specifications. These adjustments can be made quickly and accurately with the use of these gauges. These gauges can be used on all current model 2 bbl and 4 bbl carburetors to check and adjust the choke rod, vacuum brake (front and rear), and unloader angle settings.



J 34726
(METAL)



J 26701-A
(PLASTIC)

FUEL - GASOLINE

GENERAL CARBURETOR (CONTINUED)

J 23738-A

PLASTIC MITY-VAC® HAND VACUUM PUMP

Our most economical yet durable model. High impact PVC; a self-lubricating, maintenance-free, sealed, non-corrosive unit. Pumping rate of one cu. in./stroke and attains a vacuum of 25 inches of mercury in a few seconds. Set includes hand-held pump, 2 foot plastic hose and set of six adapters and one suction cup.



J 35555

METAL SILVERLINE MITY-VAC® HAND VACUUM/PRESSURE PUMP

Die-cast repairable design. Includes all accessories for complete automotive testing and one-person brake bleeding. Features fluorosilicone valves which are impervious to virtually all automotive fluids, helping to insure years of trouble-free use. Features a new easy-to-read gauge positioned for viewing by either left or right handed users.

Includes:

- Automotive adapter package
- 5 lengths of clear tubing
- Reservoir jar
- Transfer cap
- Rubber suction cup
- User manual
- Molded storage case



J 34353

ALCOHOL DETECTION KIT

Fuel containing excessive amounts of alcohol can affect vehicle driveability, emissions and fuel economy, in addition to possibly damaging fuel system components. Generally, gasoline containing more than 10% ethanol (grain alcohol), or 5% methanol (wood alcohol), is considered excessive. NOTE: Consult appropriate vehicle manufacturer/distributor for specific guidelines.

If an excessive amount of alcohol in the fuel is suspected, the J 34353 Alcohol Detection Kit, will measure the percentage of alcohol in the fuel in a few minutes. The J 34353 includes five liquid transfer pipettes in a plastic storage case with complete instructions. Additional transfer pipettes are available by ordering J 34353-5 (pkg. of 5).

NOTE: This test will detect alcohol content in most cases but is not to be considered as scientifically accurate, nor will it differentiate between the various alcohols that may be present.

Features:

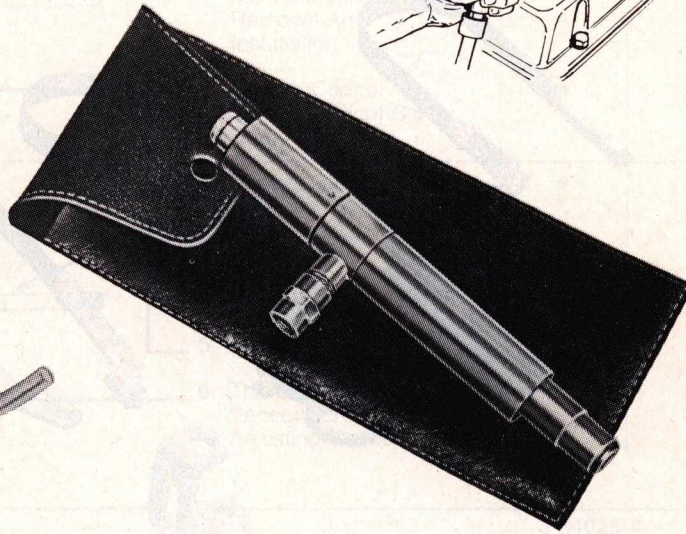
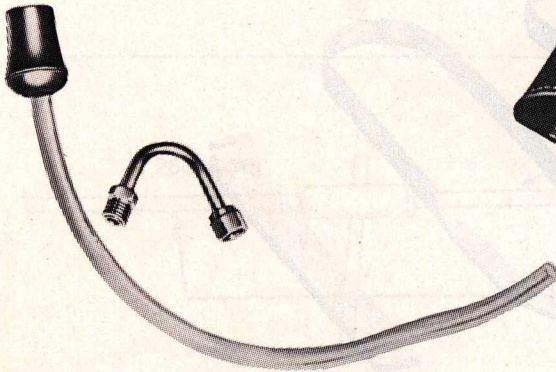
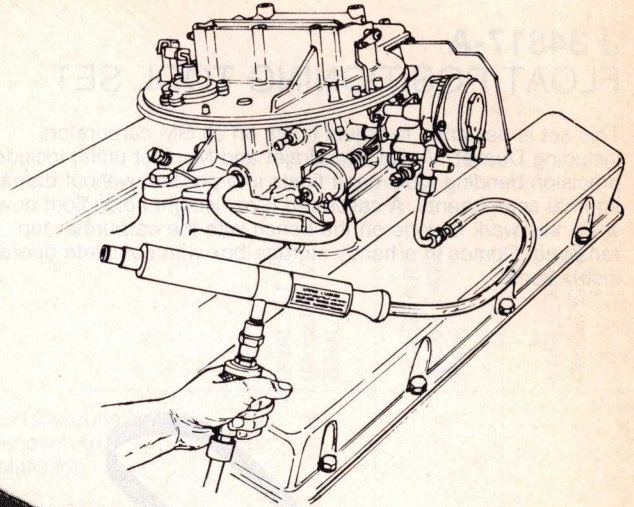
- Simple to use
- Readings obtained in minutes
- Plastic storage case
- Complete instructions included





CHOKE

J 34024 CHOKE TESTER

This unique time-saving service tool creates hot and cold air with no moving parts. Using shop air as its only source of power, the CHOKE TESTER discharges cold air (to 0°F.) from one end and hot air (to 160°F.) from the other. It can be used with equal performance on hot or cold engines. May also be used in testing automatic temperature control systems or other temperature sensors. This simple tool allows fast heating and cooling of the choke cap to check for malfunction. Hours of waiting for the carburetor to reach cold start conditions are no longer necessary. Using the tubing and fittings supplied with the CHOKE TESTER, the bi-metal spring can also be checked for proper function - in minutes!





FUEL GAUGES

	J 24156 FUEL GAUGE TESTER Universal
	J 24538-B FUEL & TEMPERATURE GAUGE TESTER Universal

	J 33431-B INSTRUMENT PANEL TESTER (Featured on page 214)
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FUEL TANK

	J 23346 FUEL TANK SENDING UNIT REMOVER & INSTALLER (1.92" Retaining Ring Dia.)
	J 28692 FUEL TANK SENDING UNIT REMOVER & INSTALLER (All "X" Car)

	J 35731 FUEL TANK SENDING UNIT SPANNER WRENCH (W-Car and AWD A-Car)
	J 36608 FUEL TANK SENDING UNIT REMOVER & INSTALLER (3.10" Retaining Ring Dia.)

ROCHESTER CARBURETORS

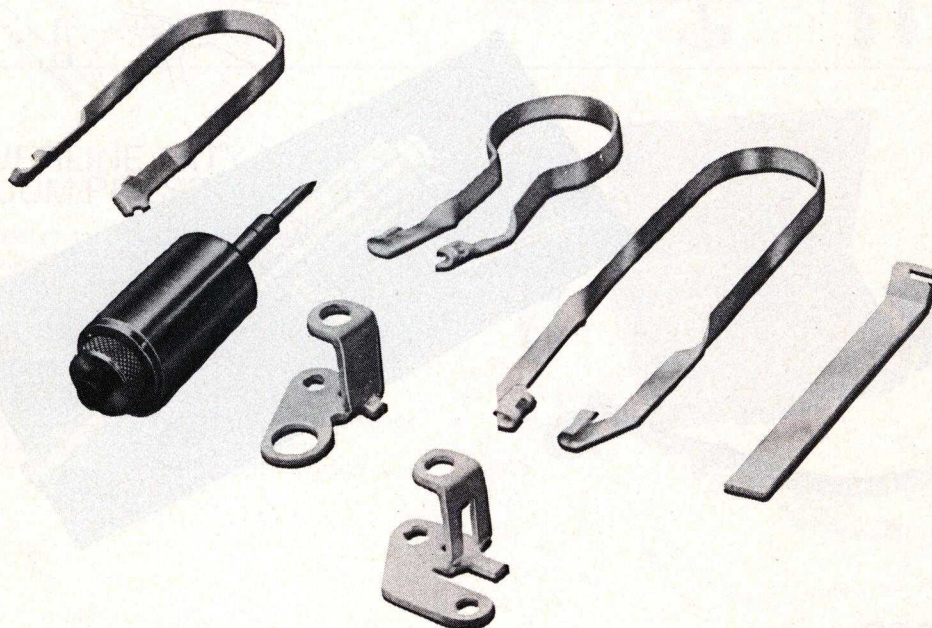
J 34817-A

FLOAT POSITIONING TOOL SET

This set is designed to adjust floats on all GM carburetors including Dualjet, Varijet, Quadrajet and Monojet units. Included precision bending tools bend floats into position without damaging internal components. A calibrated 6-oz. weight holds float down while this work is done on the bench with the carburetor top removed. Comes in a handy storage box with complete operating instructions.

Parts Included:

- J 34817-10** Short Finger Base, Varijet & Closed Loop Quadrajet/Dualjet
Long Finger Base, Monojet & Open Loop Quadrajet/Dualjet
Float Weight
- J 34817-15** Closed Loop Quadrajet/Dualjet Float Bender
- J 34817-20** Varijet Float Bender
- J 34817-25** Open Loop Quadrajet/Dualjet Float Bender
- J 34817-30** Monojet Float Bender
- J 34817-50** Molded Box
- J 34817-53** Instructions

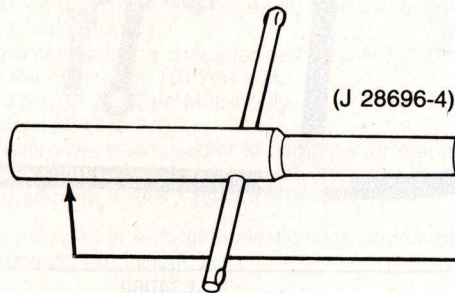


	J 9789-135 FLOAT LEVEL GAUGE SET (1979½ to Current Varijet)
	J 9789-150 SLIDING FLOAT LEVEL SCALE (1979½ to Current Varijet)
	J 22769 NEEDLE VALVE SEAT REMOVER & INSTALLER (Quadrajet/Dualjet)
	J 23417 CHOKE LEVER INSTALLER (Quadrajet/Dualjet)

	J 23443 FUEL INLET NUT WRENCH 1" (Quadrajet/Dualjet)
	J 28634 IDLE MIXTURE SCREW SOCKET - ¼" Hex (Thru 1978)
	J 28696-D MIXTURE CONTROL ADJUSTMENT SET (Featured on next page)

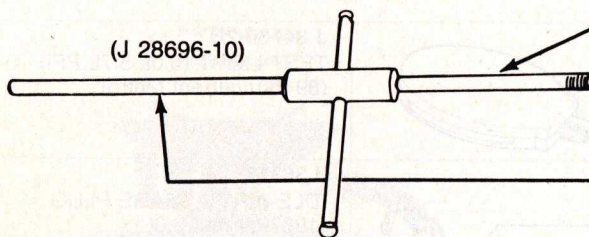
ROCHESTER CARBURETORS (CONTINUED)

J 28696-D MIXTURE CONTROL ADJUSTMENT SET (C-3 & C-4)



(J 28696-4)

1. Main Metering Set Removal And Installation
2. Mixture Control Solenoid (Rich) Screw Remover



(J 28696-10)

3. Mixture Control Solenoid (Rich & Lean) Screw Adjusting Wrench
4. Lean Authority Screw
5. Idle Air Bleed
6. Throttle Position Sensor Screw (2.5mm) Adjusting Wrench

DUALJET 210 (Model E2ME- E2MC)	QUADRAJET (Model E4ME- E4MC)	VARIJET (Model E2SE)
•	•	
•	•	
•	•	
		•
		•
•	•	

	J 28706 IDLE MIXTURE SCREW SOCKET - 4.5mm (1979)
	J 29030-B IDLE MIXTURE SOCKET - Double-D (1979 to Current)
	J 29607 ISC ADJUSTING WRENCH (1981 to Current except J-Car)
	J 29831 ISC ADJUSTING WRENCH (1981 to Current except 2.5 L-4)
	J 33815 MIXTURE CONTROL & AIR BLEED VALVE GAUGING SET (Quadrajets/Dualjet)
	J 33817 AIR BLEED ADJUSTING TOOL (Quadrajets/Dualjet)

	J 34025-A IDLE SPEED CONTROL MOTOR TESTER
	J 34817-A FLOAT POSITIONING TOOL SET (All Rochester 1984 to Current) (Featured on page 128)
	J 34928 DUAL PUMP VALVE REMOVER & INSTALLER (Truck Quadrajets 1985 & 1987 5.0L "B" Car)
	J 34935-130 EXTERNAL FLOAT LEVEL GAUGE (Pkg. of 5) (Quadrajets/Dualjet)
	J 36400 COMPUTEST TOOL SET (Featured on page 149)

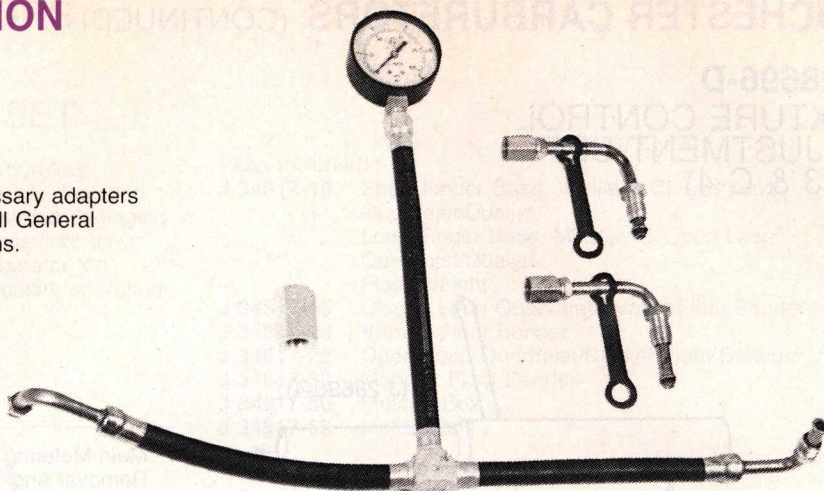
FUEL - GASOLINE

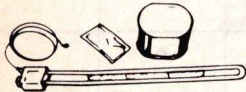
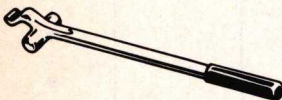
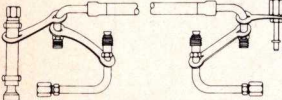
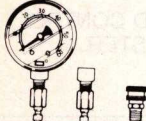
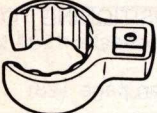
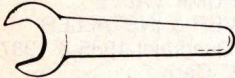
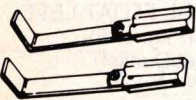


THROTTLE BODY INJECTION

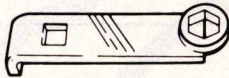
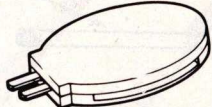
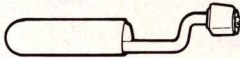
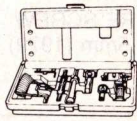
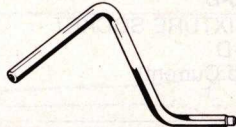
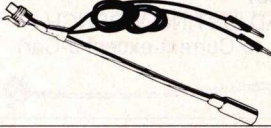
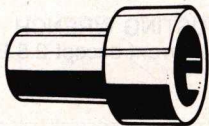
J 29658-D

FUEL PRESSURE GAUGE (0-15 PSI, 0-60 PSI)

This Fuel Pressure Gauge Set includes the necessary adapters which are required to measure fuel pressure on all General Motors 1982-current throttle body injection systems.



	J 23951 CFI BALANCE MANOMETER
	J 26868 INJECTOR REMOVER
	J 29658-89 FUEL PRESSURE QUICK CONNECT GAUGE ADAPTERS (89 A-Car, U-Van)
	J 29658-100 FUEL PRESSURE GAUGE ADAPTER KIT Includes a 0-60 psi gauge for high pressure TBI systems.
	J 29698-A FUEL LINE WRENCH 3/4" Dbl. Hex
	J 33031 IDLE AIR VALVE WRENCH 32mm
	J 33047 IDLE AIR VALVE PLUG SET
	J 33179-20 MINIMUM AIR ADJUSTMENT WRENCH
	J 34020 FUEL PRESSURE GAUGE J-Car 2.0L (1984 only)

	J 34062 BANJO BOLT WRENCH 15mm (2.0L Fuel Inlet)
	J 34730-2B TEST LIGHT (5.0L 5.7L PFI) (89 thru current Metro)
	J 36377 IDLE AIR PASSAGE PLUG (1987-current 2.0L)
	J 36400 COMPUSTEST TOOL SET (Featured on page 143)
	J 38457 MINIMUM AIR ADJUSTMENT WRENCH (90 Cadillac C, E, K-Cars)
	J 38490 TPS ADAPTER HARNESS (90 Cadillac C-Car)
	J 38548 FUEL PRESSURE REGULATOR WRENCH (1990 4.5L. Cadillac)

PORT FUEL INJECTION

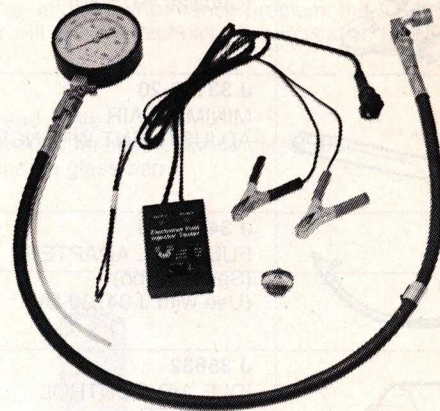
J 34730-B PORT FUEL INJECTION TEST KIT

J 34730-B is used to diagnose and service the MFI (Multiport Fuel Injection) and SFI (Sequential Fuel Injection) systems.

The Kit Includes:

- Fuel Pressure Gauge (J 34730-1)
A kPa/psi dual scale gauge which is used to check fuel pump pressure and compare injectors for equal fuel distribution.
- Test Light (J 34730-2A)
Plugs into the connector to check for electrical impulses from the ECM to the injector or TBI 700 unit.
- Test Light (J 34730-2B) Geo Metro only.
- Injector Tester (J 34730-3A)
Separately energizes each injector to compare for equal fuel impulses over a constant time interval which allows the technician to pinpoint a faulty injector.

The tools are packaged in a durable plastic case and complete operating instructions are included.



J 35800 FUEL INJECTION CLEANER - GM



The Kent-Moore fuel injection cleaner has been designed specifically for GM port fuel injected engines.

Injector cleaning on the vehicle is a simple operation.

1. Add gasoline/cleaner mixture to J 35800 container.
2. Connect to vehicle fuel pressure test port.
3. Pump J 35800 to 25 P.S.I.
4. Disable vehicle electric fuel pump.
5. Run engine for 10 minutes.

J 35800-15 FUEL INJECTOR CLEANING FLUID

A typical cleaning operation requires 3 ounces of injector cleaning fluid. The fluid is supplied in a resealable 15 oz. can with a measuring cap graduated in 1, 2 and 3 ounce increments.



J 35800-CSE




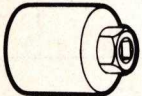
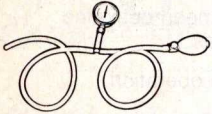
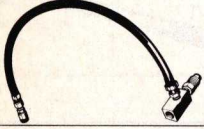
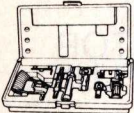
A case of 12 cans of J 35800-15 is available as J 35800-CSE

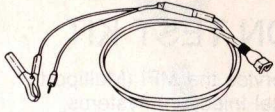
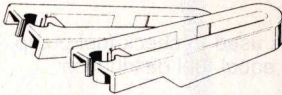
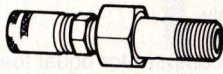
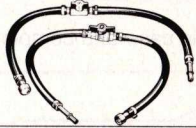
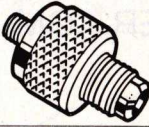
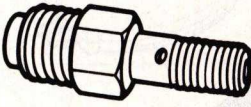
Features Include:

- 0-60 P.S.I. gauge to read fuel system pressure
- Check valve prevents reverse flow of gasoline
- Automatic pressure relief valve prevents system over pressurization
- Inline filter
- Simple one connection hook-up
- Built-in pressure pump with die cast parts
- Special steel can with durable protective coating
- Complete operating instructions J 35800 is designed to be used with the following approved injector cleaning solvents:
 - 1050002 GM Top engine cleaner
 - X66-P AC-Delco Carburetor Tune-up conditioner
 - J 35800-15 Kent-Moore Fuel Injector Cleaner

FUEL - GASOLINE

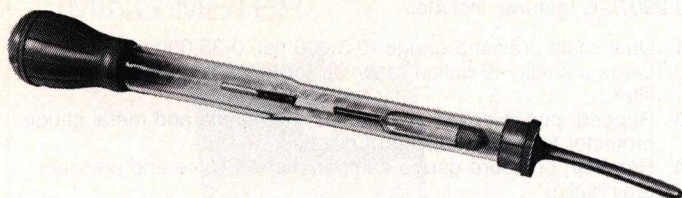
PORT FUEL INJECTION (CONTINUED)

	J 26567 FUEL FILTER WRENCH (Cadillac 1975-80)
	J 33179-20 MINIMUM AIR ADJUSTMENT WRENCH
	J 34730-75 FUEL RAIL ADAPTER (Sprint Turbo) (Use with J 34730-B)
	J 35632 IDLE AIR CONTROL REMOVER (5.0L & 5.7L)
	J 35691 TURBO CHARGER PRESSURE GAUGE (Sprint/Spectrum Turbo)
	J 35957-10 FUEL PRESSURE GAUGE ADAPTER (Used with J 34730-1)
	J 36400 COMPUTEST TOOL SET (Featured on page 149)

	J 36674 COLD START INJECTOR HARNESS (Sprint Turbo)
	J 37088-A FUEL LINE QUICK CONNECT SEPARATOR ($\frac{5}{16}$ " and $\frac{3}{8}$ " fuel line)
	J 37144 FUEL PRESSURE GAUGE ADAPTER (1988 Nova with Twin Cam Engine) Use with J 34730-B
	J 37287 INLET & RETURN FUEL LINE SHUT-OFF ADAPTERS
	J 37746 FUEL PRESSURE GAUGE ADAPTER '89 Tracker Used w/J 34730-1
	J 38347 FUEL PRESSURE GAUGE ADAPTER '89 Prizm (Used w/J 34730-1)

GENERAL

J 34352 DIESEL FUEL QUALITY TESTER



To determine if diesel fuel quality should be considered a part of diagnosing an engine performance problem, the J 34352 Hydrometer will give the technician an indication of diesel fuel quality.

Features:

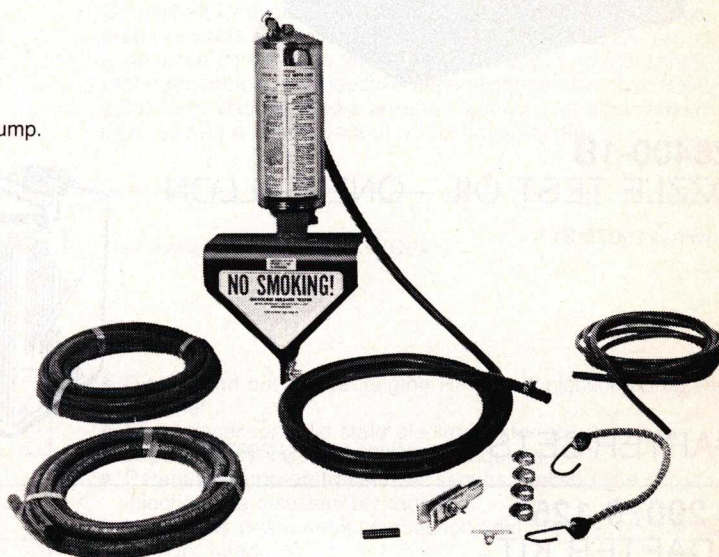
- Easy to read scale
- Special molded tip impervious to diesel fuel
- Instructions on glass barrel

J 33933 DIESEL MILEAGE TESTER

The J 33933 Diesel Mileage Tester is used to accurately test mileage on diesels with an engine-mounted mechanical fuel pump.

J 33933 Features:

- Mounts on driver or passenger door
- Self-contained control valve
- One tenth of a gallon capacity
- Extremely accurate and repeatable
- Quick, easy hook-up
- Return line shut-off clamp included
- Universal mounting brackets
- Complete instructions included



J 29653-A ULTRASONIC NOZZLE CLEANER



- Cleans a complete set of 6 to 8 poppet nozzles quickly at one time.
- Specially designed stainless steel tray holds nozzles in matched sets.
- Cleaning solution is heated and ultrasonically agitated for fast cleaning.

The J 29653-A is designed for fast, complete cleaning of GM poppet-type nozzles used in 1980 to 1985 passenger car diesel engines.

J 29653-A consists of:

- J 29653-1 Cleaning Tank/Generator Unit
- J 29653-2 1 lb. of Cleaning Powder mixes with water to make solution (4 teaspoons to $\frac{3}{4}$ gallon)
- J 29653-3 Nozzle Dissassembly tool
- J 29653-4 Parts Tray and easy to follow instructions

Specifications:

Tank Dimensions:
5"W x 9"L x 4"D
Tank Capacity: $\frac{1}{4}$ Gallon
Cleaning Power: 100 Watts

Elec: 115V, 60 Cycle. All circuitry is solid state for long, trouble-free life. Generator and heater have separate controls.

FUEL – DIESEL

GENERAL (CONTINUED)

J 29075-B NOZZLE TESTER

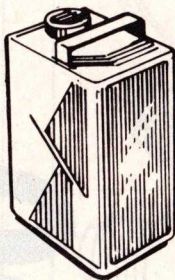


This portable tester is designed for quick, easy testing of injection nozzle opening pressure, leakage, chatter, and spray pattern. J 29075-B features include:

1. Dual scale pressure gauge (0-5,000 psi, 0-35,000 kPa).
2. Large capacity .9 gallon reservoir for test fluid with 5 micron filter.
3. Rugged, portable design with carrying handle and metal gauge protector for bench testing of nozzles.
4. Has both pressure gauge damper/shut-off valve and pressure drain valve.
5. Supplied with one gallon of test fluid and test beaker to catch nozzle spray (J 26400-1).

J 26400-1B NOZZLE TEST OIL - ONE GALLON

(Use with J 29075-B)



ADAPTER SETS (not included with J 29075-B)

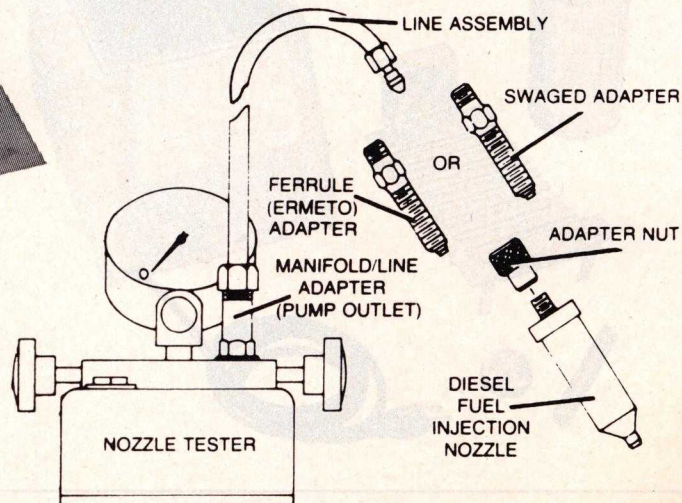
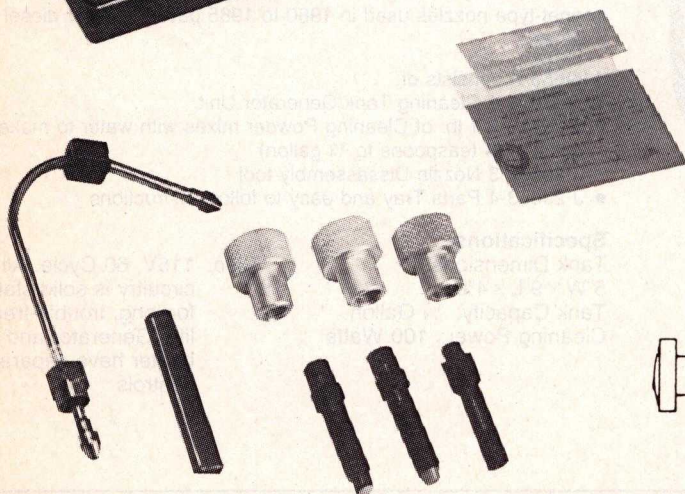
J 29079-125 ADAPTER KIT



The J 29079-125 Adapter Kit contains the necessary quick-connect adapters to test all current GM diesel engine nozzles (9/16", 12mm, 14mm thread size). The unique design of these quick-connect adapters simplifies attachment of nozzles of the test line.

Includes:

J 29079-2	Adapter Nut (M12 x 1.5)	J 29079-25	Manifold Line Adapter
J 29079-3	Adapter Nut (M14 x 1.5)	J 29079-27	Manifold Line Adapter
J 29079-4	Adapter Nut (9/16" x 18)	J 29079-70	Swaged Adapter
		J 29079-71	Ferrule Adapter



GENERAL (CONTINUED)

J 33300 TACH-N-TIME DIESEL TIMING METER



The J 33300 Tach-N-Time is a microprocessor based service tool designed for fast and accurate dynamic timing of diesel engines. Using the start of the injection/combustion signal and the crankshaft location signal, a microprocessor gives a digital display of exact engine RPM and injection pump timing in degrees.

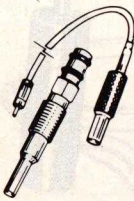

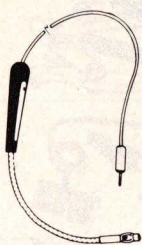
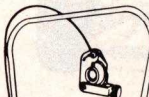


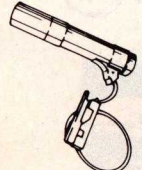
The time of injection/combustion is picked up by either of two methods:

1. A transducer that clamps on the fuel injection line that senses the fuel surge in the line, or
2. A luminosity probe installed in place of the glow plug of #1 cylinder.

Crankshaft location is picked up with a magnetic probe. The probe offset is automatically computed by the Tach-N-Time and is adjustable from 0° to 200°. On engines with no crankshaft probe receptacle, an inductive timing light can be attached to the J 33300 to visually read crankshaft location. An adjustable pulse delay allows a direct readout of the timing angle.

ACCESSORIES & APPLICATION CHART

(not included as part of J 33300)

	1.8L & 2.2L 4 cyl.	4.3L V-6	5.7L V-8	6.2L V-8
 J 33300-30 LUMINOSITY PROBE HARNESS		•	•	•
 J 33300-10A LUMINOSITY PROBE (10mm x 1.0 Thread)		•	•	
 J 33300-20 MAGNETIC CRANKSHAFT PROBE		•	•	•
 J 33300-25A 1/4" CLAMP-ON LINE TRANSDUCER (Black)			•	•
 J 33300-50A 5MM CLAMP-ON LINE TRANSDUCER (Red)		•		
 J 33300-60A 6MM CLAMP-ON LINE TRANSDUCER (Gray)		•		
 J 34186 INDUCTIVE TIMING LIGHT	•			

Features:

- Digital read-out of both engine RPM and injection pump timing together.
- Microprocessor solid state electronics for accuracy and dependability; no field calibration required.
- Patented clamp-on transducer senses injection line surge - no injection line disassembly required.
- Luminosity probe sees combustion light in place of glow plug in cylinder head.
- Magnetic probe adapts to engines with magnetic probe socket, and tester has variable offset to locate TDC.
- Easily adapts to read timing on engines without magnetic probe socket through use of inductive timing light.
- Power cables conveniently attach to 12/24 volt power source - no internal batteries to run down.
- LED injection sensor light shows clearly if test signal is being received by Tach-N-Time.
- Custom case includes storage space for connectors, accessories, and operating instructions.

Specifications:

- Timing range 0° to 51° with strobe light, 220° with magnetic probe.
- R.P.M. range 360 to 6,000.
- Magnetic probe or strobe timing light.
- Luminosity or clamp-on sensor.
- Crankshaft socket offset. Adjustable in 1° increments from 0° to 200°.
- Accuracy $\pm .2^\circ$ timing ± 1 R.P.M.
- Operating temperature - 20°F to 130°F.
- Input battery voltage 8 to 26V D.C. Power draw 5 amp.
- Vacuum fluorescent readout.
- Microprocessor based system.
- No calibration required.
- Carrying case with accessory storage.
- New improved magnetic probe.
- Sensor light to show luminosity or clamp-on input.
- Rocker switches.

Patents: 4,192,179 4,304,126 4,319,481.

INJECTION PUMPS

J 33333-B

DIESEL INJECTION PUMP SERVICE KIT

Seal replacement on all General Motors diesel injection pumps is a quick and easy operation with the tools in this new Kent-Moore service kit. Pump leaks can now be easily diagnosed and repaired. With the use of these tools, recalibration is not necessary. A rugged storage box to prevent loss of the smaller tools and instructions are included.

NOTE: All tools in the J 33333-B Kit, can be ordered separately.

Included in Set:

GENERAL

J 9553-01 Drive Shaft Retaining Ring Remover. Retaining ring and O-ring removal.

J 29692-B Pump Holding Fixture. Easy working access for the Stanadyne and Diesel Kiki Pumps.

J 33197 Shaft Seal Pressure Tester. A quick pressure test for seal leaks on the Stanadyne pump.

J 33198 Synkut Oil Seal Lubricant for proper pump assembly. This is the recommended lubricant.

J 33333-1 Storage Case

STANADYNE INJECTION PUMP (ROOSA-MASTER)

J 29745-A Shaft Seal Protector

J 29746-B Cam Advance Wrench

J 29747-B Cam Advance Screw Remover Bushing

J 29748-A Plug Wrench

J 33081-A Advance Plunger Seal Installer

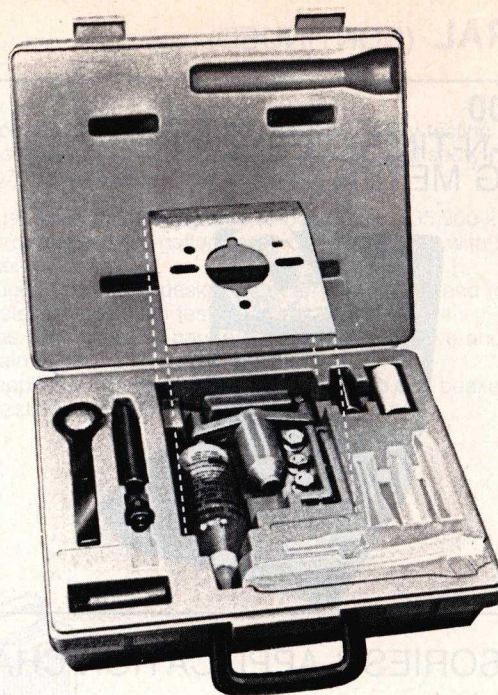
These tools in the J 33333-B Kit for the Stanadyne injection pump will allow quick service to all the pump seals. Recalibration in a fuel injection pump test stand is not necessary for seal service with these tools.

DIESEL KIKI INJECTION PUMP

J 33308 Drive Shaft Seal Protector

J 33309 Distributor Head Assembly Plug Wrench

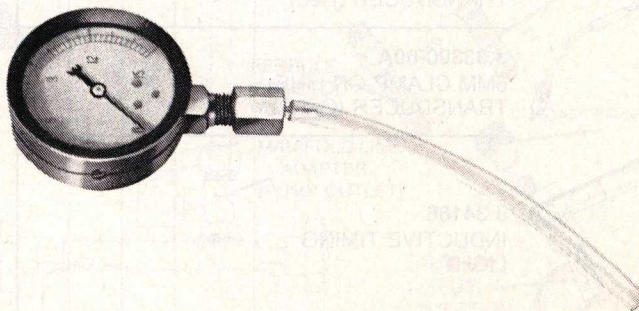
These two tools are required to properly service the drive shaft seal and to remove the retaining nut on the distributor head assembly.



J 28552

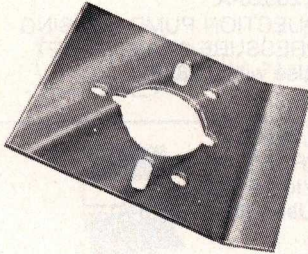
INJECTION PUMP HOUSING PRESSURE GAUGE

The 0-15 p.s.i. pressure gauge can be used to check injection pump housing pressure on the V-8 diesel engine. J 28552 is used in conjunction with J 28526 A Injection Pump Housing Pressure Adapter.



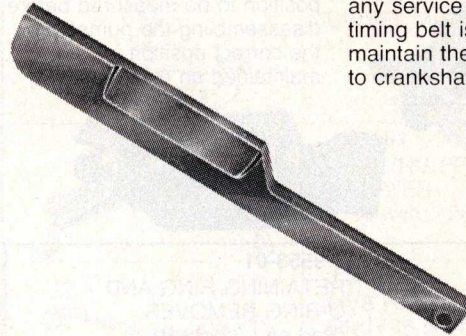
1.8L & 2.2L DIESEL KIKI INJECTION PUMP

J 29692-B INJECTION PUMP HOLDING FIXTURE



This fixture makes bench mounting of Diesel Kiki and Stanadyne injection pumps for off-car service simple and easy. J 29692-B is designed so the pump is mounted at an angle to allow ease of assembly of internal pump parts such as the elastic cast rings, throttle shaft seals, etc. (Part of J 33333-B)

J 29761 CAMSHAFT FIXING PLATE (1.8L only)



This tool is installed in the slot at the rear of the camshaft with the number 1 piston at TDC. J 29761 will prevent the camshaft from rotating during any service operation when the timing belt is removed to maintain the correct camshaft to crankshaft position.

	J 9553-01 RETAINING RING AND O-RING REMOVER
	J 22700 FUEL FILTER WRENCH
	J 22888-20 INJECTION PUMP GEAR REMOVER
	J 26925 MAG TAC (Magnetic Pick-up Tachometer)
	J 29075-B NOZZLE TESTER (Use with J 29079-125) (Featured on page 134)
	J 29079-125 ADAPTER SET (Use with J 29075-B)
	J 29763 STATIC TIMING GAUGE
	J 33300 DIESEL TIMING METER (Use with J 33300-60A and J 34186)

	J 33300-60A 6MM CLAMP-ON LINE TRANSDUCER (Use with J 33300)
	J 33308 DRIVE SHAFT SEAL PROTECTOR (Part of J 33333-B)
	J 33309 DISTRIBUTOR HEAD ASSEMBLY PLUG WRENCH (Part of J 33333-B)
	J 33333-B INJECTION PUMP SERVICE KIT for Diesel Kiki and Stanadyne pumps
	J 34186 INDUCTIVE TIMING LIGHT (Use with J 33300)
	J 34352 DIESEL FUEL QUALITY TESTER
	J 36608 FUEL TANK SENDING UNIT REMOVER AND INSTALLER

4.3L V-6 STANADYNE INJECTION PUMP

J 29601 THROTTLE SHAFT CAM TIMING ADAPTER

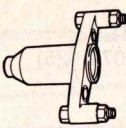
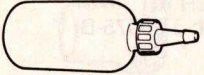


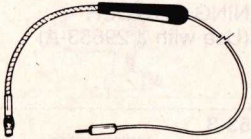
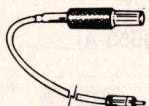
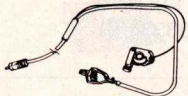




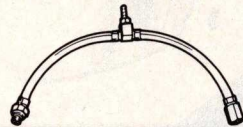

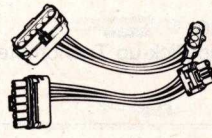


The throttle shaft seals on the injection pump can be serviced on the 4.3L, 5.7L and 6.2L engines using this adapter. J 29601 allows the cam timing position to be measured before disassembling the pumps so the correct position is maintained on reassembly.

	J 9553-01 RETAINING RING AND O-RING REMOVER (Part of J 33333-B)
	J 23738-A HAND OPERATED VACUUM PUMP (Mity-Vac)
	J 25304 TIMING WRENCH (Use with J 33300)
	J 26701-A ANGLE GAUGE (Use with J 26701-20) (Featured on page 139)
	J 26701-20 VACUUM VALVE ADAPTER (Use with J 26701-A) (Featured on page 139)
	J 26925 MAG TAC (Magnetic Pick-up Tachometer)
	J 26996 MANIFOLD COVER SET All
	J 26996-10 MANIFOLD COVERS (1985 only)
	J 28402 PUMP LINE NUT WRENCH (5/8")

	J 28438 NOZZLE CAP PLUG SET
	J 28526-A INJECTION PUMP HOUSING PRESSURE ADAPTER SET (Use with J 28552)
	J 28552 PRESSURE GAUGE 0 to 15 P.S.I. (Use with J 28526-A)
	J 29075-B NOZZLE TESTER (Use with J 29079-125)
	J 29079-125 ADAPTER KIT (Use with J 29075-B)
	J 29653-A ULTRASONIC NOZZLE CLEANER (Featured on page 133)
	J 29692-B INJECTION PUMP HOLDING FIXTURE (Part of J 33333-B)
	J 29745-A SHAFT SEAL PROTECTOR (Part of J 33333-B)
	J 29746-B CAM ADVANCE WRENCH (Part of J 33333-B)
	J 29747-B CAM ADVANCE SCREW REMOVER BUSHING (Part of J 33333-B)
	J 29748-A PLUG WRENCH (Part of J 33333-B)
	J 33081-B ADVANCE CAM PLUG SEAL INSTALLER (Part of J 33333-B)

4.3L V-6 STANADYNE INJECTION PUMP (CONTINUED)

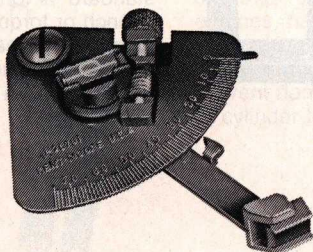
	J 33197 SHAFT SEAL PRESSURE TESTER (Part of J 33333-B)
	J 33198 SYNKUT OIL SEAL LUBRICANT (Part of J 33333-B)
	J 33300 DIESEL TIMING METER 4.3L V-6 use with: J 33300-20 & J 33300-50A or J 33300-10A, J 33300-20 & J 33300-30) (Featured on page 135)
	J 33300-10A LUMINOSITY PROBE (10mm × 1.0 Thread)
	J 33300-20 MAGNETIC CRANKSHAFT PROBE
	J 33300-30 LUMINOSITY PROBE HARNESS
	J 33300-50A 5MM CLAMP-ON LINE TRANSDUCER (Red)


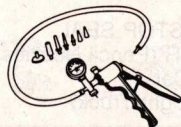

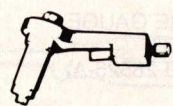
	J 33333-B INJECTION PUMP SERVICE KIT (Stanadyne and Diesel Kiki Pumps)
	J 33933 DIESEL MILEAGE TESTER
	J 34151 HOUSING PRESSURE ADAPTER (Use with J 28552)
	J 34678-A MVS HARNESS 1985 ONLY (6 pin connector)
	J 34678-50 MVS HARNESS ADAPTERS (3 to 6 pin connector) Use with J 34678-A for 1984 California Engines and early 1985 Engines
	J 34829 METERING VALVE SENSOR ADJUSTING TOOL (1984-85)
	J 36608 FUEL TANK SENDING UNIT REMOVER AND INSTALLER

5.7L V-8 STANADYNE INJECTION PUMP

J 26701-A
ANGLE GAUGE
J 26701-20
VACUUM
VALVE
ADAPTER

The J 26701-20 is required to adapt J 26701-A Angle Gauge to the throttle lever to check and adjust the 4.3L and 5.7L vacuum regulator valve. This adjustment is made in conjunction with J 23738-A Vacuum Pump or equivalent.

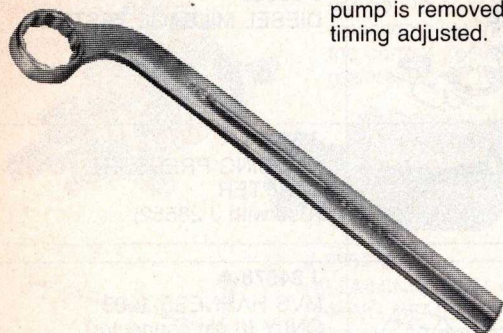


	J 9553-01 RETAINING RING AND O-RING REMOVER (Part of J 33333-B)
	J 23738-A HAND OPERATED VACUUM PUMP
	J 36608 FUEL TANK SENDING UNIT REMOVER AND INSTALLER
	J 26896 STATIC TIMING GAUGE

FUEL – DIESEL

5.7L V-8 STANADYNE INJECTION PUMP (CONTINUED)

J 26987-A INJECTOR PUMP WRENCH (9/16")

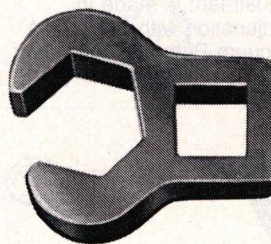


This thin-wall wrench is specially designed to enable loosening or removal of the injection pump mounting nuts. J 26987-A is required when the pump is removed or static timing adjusted.

	J 26925 MAG TAC (Magnetic Pick-up Tachometer)
	J 26996 MANIFOLD COVER SET
	J 26996-10 MANIFOLD COVERS (with EGR)
	J 28425 PUMP ADAPTER SEAL INSTALLER
	J 28438 NOZZLE CAP PLUG SET
	J 28475 CARBON STOP SEAL INSTALLER (Pencil Nozzles) (1978-79 Car) (1978-81 Light Truck)
	J 28526-A INJECTION PUMP HOUSING PRESSURE ADAPTER SET (Use with J 28552)
	J 28552 PRESSURE GAUGE 0 to 15 P.S.I. (Use with J 28526-A)

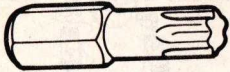
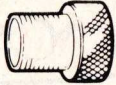
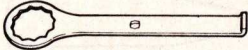
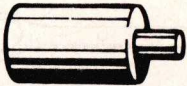
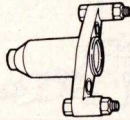
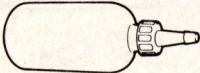


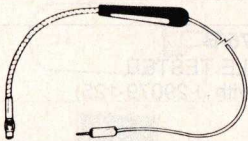
	J 29075-B NOZZLE TESTER (Use with J 29079-125)
	J 29079-125 ADAPTER KIT (Use with J 29075-B)
	J 29601 THROTTLE SHAFT CAM ADVANCE ADAPTER
	J 29653-A ULTRASONIC NOZZLE CLEANER (Featured on page 133)
	J 29653-2 CLEANING POWDER (1 lb.)(Use with J 29653-A)
	J 29653-3 NOZZLE ASSEMBLY TOOL (Part of J 29653-A)
	J 29692-B INJECTOR PUMP HOLDING FIXTURE (Part of J 33333-B)
	J 29745-A SHAFT SEAL PROTECTOR (Part of J 33333-B)

J 28402 INJECTION LINE WRENCH - (5/8")



When servicing injection lines individually, loosening the connection at the injection pump is extremely difficult on several of the lines using standard wrenches. The J 28402 is designed to be used in conjunction with a standard 3/8" drive ratchet wrench or torque wrench and extension for easy access to the injection pump line connections on the 4.3L and 5.7L engines.

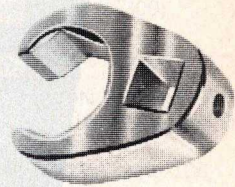
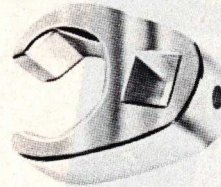
5.7L V-8 STANADYNE INJECTION PUMP (CONTINUED)

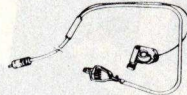
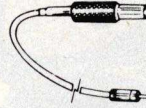
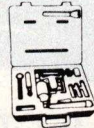

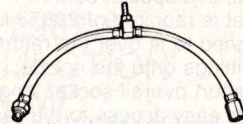
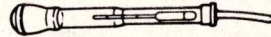

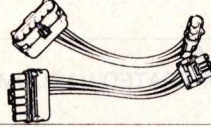

	J 29746-B CAM ADVANCE WRENCH (Part of J 33333-B)
	J 29747-B CAM ADVANCE SCREW REMOVER BUSHING (Part of J 33333-B)
	J 29748-A PLUG WRENCH (Part of J 33333-B)
	J 33081-B ADVANCE CAM PLUG SEAL INSTALLER (Part of J 33333-B)
	J 33197 SHAFT SEAL PRESSURE TESTER (Part of J 33333-B)
	J 33198 SYNKUT OIL SEAL LUBRICANT (Part of J 33333-B)
	J 33300 DIESEL TIMING METER 5.7L V-8 use with: J 33300-20 and J 33300-25 or J 33300-10, J 33300-20, and J 33300-30 (Featured on page 135)
	J 33300-10A LUMINOSITY PROBE
	J 33300-20 MAGNETIC CRANKSHAFT PROBE

J 29697-A INJECTION LINE WRENCH (9/16")

J 29698-A INJECTION LINE WRENCH (3/4")

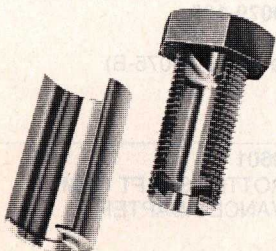
The use of these two line wrenches makes removal of injection lines at the nozzle fast and easy. These wrenches are compact with a 3/8" square drive for use on injection lines where access is limited.



	J 33300-25A 1/4" CLAMP-ON LINE TRANSDUCER
	J 33300-30 LUMINOSITY PROBE HARNESS
	J 33333-B INJECTION PUMP SERVICE KIT for Stanadyne and Diesel Kiki Pumps (Featured on page 136)
	J 33933 DIESEL MILEAGE TESTER (Featured on page 133)
	J 34151 INJECTION PUMP PRESSURE ADAPTER (Pumps with MVS)
	J 34352 DIESEL FUEL QUALITY TESTER (Featured on page 133)
	J 34678-A MVS HARNESS/1985 ONLY (6 pin connector)
	J 34678-50 MVS HARNESS ADAPTERS (3 to 6 pin connectors) (Use with J 34678)
	J 34829 METERING VALVE SENSOR ADJUSTING TOOL

J 29082-B NOZZLE REMOVER

The "pencil" type nozzles used on 1978-1981 5.7L V-8 diesel engines may be easily removed with this tool. J 29082-B has been designed to prevent damage to the nozzles or cylinder head.



5.7L V-8 STANADYNE INJECTION PUMP (CONTINUED)

J 34029-A HIGH IMPEDANCE DIGITAL MULTIMETER



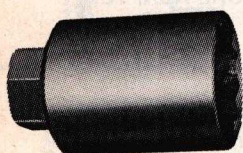
The hand held J 34029-A combines reliability, ease of operation, and a highly versatile selection of features into a state-of-the-art diagnostic tool.

Features Include:

- Audible and visual continuity function
- 22 megaohm input impedance (meets 10 megaohm minimum for C3)
- Single multi-function switch
- In-circuit resistance measurements
- Two year battery life
- 3½" LCD display
- Low battery indicator

6.2L V-8 STANADYNE INJECTION PUMP

J 29873 NOZZLE SOCKET (30mm)

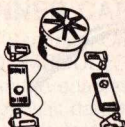

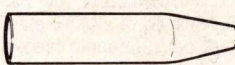
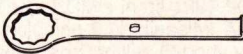

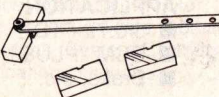

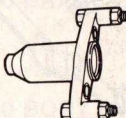




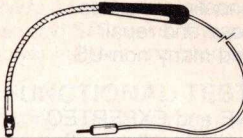
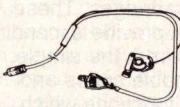
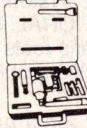

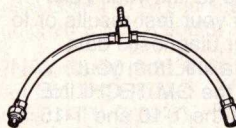
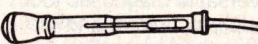
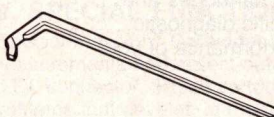
To remove and install the injection nozzles on the 6.2L diesel, this special 30mm socket is required. J 29873 is designed to fit over the return line fittings onto the nozzle. The short overall socket length allows easy access to the rear cylinder nozzles using a standard ⅜" drive ratchet.

	J 9553-01 RETAINING RING AND O-RING REMOVER (Part of J 33333-B)
	J 23738-A HAND OPERATED VACUUM PUMP
	J 26925 MAG TAC (Magnetic pick-up tachometer)

	J 28526-A INJECTION PUMP HOUSING PRESSURE ADAPTER SET (Use with J 28552)
	J 28552 INJECTION PUMP HOUSING GAGE (Use with J 28526-A)
	J 29075-B NOZZLE TESTER (Use with J 29079-125)
	J 36608 FUEL TANK SENDING UNIT REMOVER AND INSTALLER
	J 29079-125 ADAPTER KIT (Use with J 29075-B)
	J 29601 THROTTLE SHAFT CAM ADVANCE ADAPTER

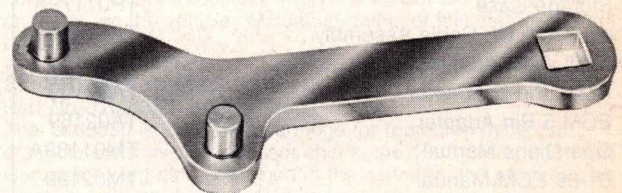
6.2L V-8 STANADYNE INJECTION PUMP (CONTINUED)

	J 29664 MANIFOLD COVER SET
	J 29692-B HOLDING FIXTURE (Part of J 33333-B)
	J 29745-A SHAFT SEAL PROTECTOR (Part of J 33333-B)
	J 29748-A PLUG WRENCH (Part of J 33333-B)
	J 33042 STATIC TIMING GAUGE
	J 33043-A THROTTLE POSITION SWITCH GAUGE BLOCK SET (6.2L)
	J 33081-B ADVANCE CAM PLUG SEAL INSTALLER (Part of J 33333-B)
	J 33197 SHAFT SEAL PRESSURE TESTER (Part of J 33333-B)
	J 33198 SYNKUT OIL SEAL LUBRICANT (Part of J 33333-B)
	J 33300 DIESEL TIMING METER (Use with J 33300-25 and J 33300-20) (Featured on page 135)

	J 33300-20 MAGNETIC CRANKSHAFT PROBE (Use with J 33300)
	J 33300-25A 1/4" CLAMP-ON TRANSDUCER (BLACK) (Use with J 33300)
	J 33333-B INJECTION PUMP SERVICE KIT For Stanadyne and Diesel Kiki Pumps (Featured on page 136)
	J 33933 DIESEL MILEAGE TESTER (Featured on page 133)
	J 34151 HOUSING PRESSURE ADAPTER (Use with J 28552)
	J 34352 DIESEL FUEL QUALITY TESTER (Featured on page 133)
	J 36142 VACUUM REGULATOR VALVE GAUGE (1987 to current)

J 29872 INJECTION PUMP ADJUSTING TOOL

Using J 29872, the technician can easily rotate the 6.2L injection pump to the correct timing position. The unique design facilitates use on tight installations.



ENGINE — ELECTRICAL

THE TECH•1 MODULAR DIAGNOSTIC SYSTEM

The TECH 1 Tester is a handheld diagnostic computer specifically designed to help you diagnose and repair electronic systems used on most US and many non-US vehicles.

As an integral part of the GM TECHLINE and EXPECTEC product series, the TECH 1 provides extensive diagnostic capability through its series of pluggable cartridges. These cartridges are grouped in categories which provide ascending levels of diagnostic capability. They range from the simple SCANNER functions of reading vehicle trouble codes and diagnostic data; to the SYSTEM TESTER functions which allow you to penetrate the on-vehicle electronic systems to uncover problems; to the sophisticated FUNCTIONAL TEST DIRECTOR which performs a series of automatic tests to identify faulty components or point you to specific problem areas.

The capability of the TECH 1 Tester can be expanded by using TECH 1 SPECIAL FUNCTION cartridges. These cartridges enable you to diagnose specific problems affecting vehicle performance.

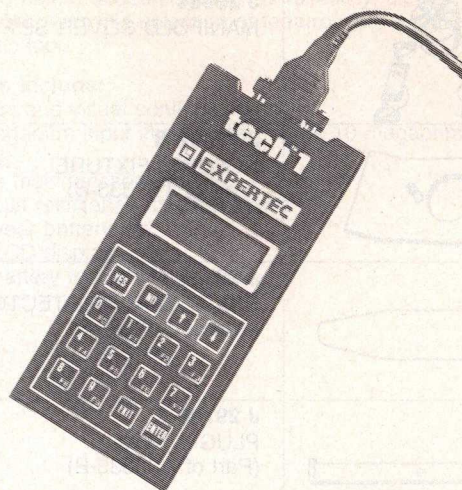
PERIPHERAL INTERFACE cartridges further expand the capability of the TECH 1 by allowing you to link your TECH 1 to a printer for a "hard copy" printout of your test results or to a CRT for a "big screen" display of your diagnostic data. These interface cartridges also provide a link from your TECH 1 to other diagnostic products in the GM TECHLINE and EXPECTEC product series such as the T-10 and T-15 TECHNICAL SERVICE INFORMATION SYSTEMS.

The TECH 1 Tester is a powerful and versatile diagnostic tool. The technical material presented will help you understand the various cartridge options and other accessories currently available for your TECH 1. Once you have reviewed this material, you will be able to select the cartridges and accessories which will meet your specific diagnostic requirements and will enhance the performance of your TECH 1 Tester.

ACCESSORIES

	Part Number
* Tech 1 Unit Only (No Cables, Adapters or Cartridges)	TA01129A
Printer Kit (Without RS232C Interface Cartridge)	TK00540A
Printer Kit (With RS232C Interface Cartridge)	TK00840A
* Storage Case	TP01179A
* 12 Pin ALDL Cable Assembly	TA01139A
* ALDL Test Adapter	TA01159
ALDL Pin-E Adapter	TA02149
ECM 5 Pin Adapter	TA02169
* Operations Manual	TM01189A
81-89 ECM Manual	TM02199
86-87 E/K System Manual	TM03209
81-89 F/Y Manual	TM04349A
E & C Bus Adapter	TA03259
Opel Battery Cable Adapter	TA01260
3 Pin Adapter (Isuzu)	TA02279A
TECH 1 Training Video	9400150
TECH 1 Functional Test Director (FTD) Video Tape	9400157
Mass Airflow Sensor VideoTape (30 min.)	
Diagnostics of AC, Hitachi, and Bosch Sensors	9400159

* Included with TK00000



NAMES AND CONFIGURATIONS

F/Y 86-89 5/5.7L FTD

VEHICLE MODEL

- F/Y vehicles
- LOTUS
- FORD, etc.

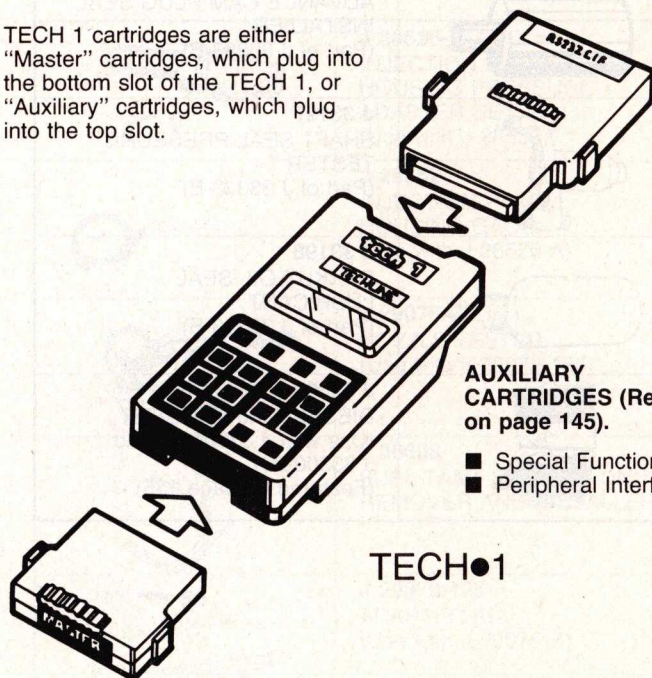
MODEL YEAR

- 86-89
- 87-90
- 81-86, etc.

APPLICATION

- 5/5.7L FTD
- ECM "PLUS"
- Brake, etc.

TECH 1 cartridges are either "Master" cartridges, which plug into the bottom slot of the TECH 1, or "Auxiliary" cartridges, which plug into the top slot.



AUXILIARY CARTRIDGES (Ref. V on page 145).

- Special Function
- Peripheral Interface

TECH•1

MASTER CARTRIDGES (Ref. I, II, III & IV on page 145).

- Scanners
- System Testers
- Functional Test Directors

TECH 1 DIAGNOSTIC CARTRIDGES

I. SCANNER CARTRIDGES

TECH 1 "Scanner" Cartridges are intended to diagnose Electronic CONTROL MODULES (ECM) and ECM-related vehicle problems. Each cartridge enables you to read out and display trouble codes and other diagnostic data with easy to understand descriptors. Scanner Cartridges also feature a "Snapshot" capability which allows you to diagnose intermittent problems by capturing up to 389 data samples surrounding an intermittent fault condition. All cartridges operate in four basic modes: Data List, Trouble Codes, Snapshot, and Miscellaneous Tests. Currently available cartridges for North American applications include:

- **ALL 81-86 ECM Cartridge**
Part No. TK02110A
Tests ECM's in all 1981-86 GM passenger cars and light trucks (except diesels). Also tests BCM's on 1985-86 Cadillac C-Body vehicles.
- **87-90 ECM "PLUS" Cartridge**
Part No. TK02050B
Tests ECM's in all 1987-90 GM passenger cars and light trucks (including 6.2L diesels). Also tests BCM and SIR systems on selected Cadillac C-body vehicles.

II. SYSTEM TESTER CARTRIDGES

In addition to providing basic scanner functions, TECH 1 System Tester Cartridges enable you to perform a series of "interactive" tests. This powerful feature gives you the ability to control various vehicle sub-systems, exercise actuators and solenoids, drive displays and read switch settings directly from your TECH 1. Prompts guide you through each test procedure. All cartridges operate in five basic modes: Data List, Monitor, Trouble Codes, Snapshot, and Miscellaneous Tests. Additional test modes are available in some cartridges. System Cartridges available for North American applications include:

- **E/K 86-87 SYSTEM Cartridge**
Part No. TK03020
Tests 1986-87 GM-30/33/35 E/K body vehicles including Riviera, Reatta, Toronado, Eldorado, Seville, Allante, and Trofeo. Tests all computer modules including BCM, ECM, IPC, CCDIC, ECCP, CRTC, HVAC, and VOICE.
- **88-90 BRAKE Cartridge**
Part No. TK03030
Tests Antilock Brake Systems in GM's 1988-90 B, D, W, and Y body vehicles.
- **88-90 BODY SYSTEMS Cartridge**
Part No. TK03040
Tests non-engine and non-brake related electronic components in GM's 1988-90 vehicles including BCM, IPC, HVAC, SIR, accessory controllers, and Delco Electronics E&C audio components.
- **HYDRA-MATIC 88-90 TRANSMISSION Cartridge**
Part No. TK03590
Tests all 1988-90 GM Hydra-Matic hydraulic transmissions. Calculates shift times, torque converter engagement times, park-to-drive engagement times and 0 to 60 MPH (or 0-100 KPH) times. Also provides for manual and automatic control of torque converter clutch.
- **RWAL/4WAL SOFTWARE Cartridge**
Part No. TK02650
This software cartridge is for use with the TECH 1 Scanner part number TK00000. It operates on 1988-89 C/K and S/T trucks with

RWAL systems as well as the new 4WAL systems on 1990 M/L van and S/T trucks. This package contains the cartridge; new power harness and special ALDL adapter.

III. FUNCTIONAL TEST DIRECTOR CARTRIDGES

The "FTD" series of TECH 1 Cartridges are designed to operate with GM's most advanced ECM's. In addition to basic "read only" scanner functions, FTD Cartridges are capable of performing sophisticated "interactive" tests in either an automatic or operator-assisted mode. FTD's have the ability to automatically control critical engine parameters such as RPM, spark advance, air/fuel ratio, EGR, A.I.R. solenoids, etc. while simultaneously monitoring over 40 other engine parameters. In addition, FTD Cartridges support road testing and intermittent problem testing. FTD Cartridges operate in six basic modes: Data List, Functional Test Director, Trouble Codes, Snapshot, Single Tests, and Road Tests. Cartridges currently available for North American applications include:

- **F/Y 86-89 5.0/5.7L FTD Cartridge**
Part No. TK04040A
Tests GMP4 ECM's in 1986-89 GM F and Y-body vehicles equipped with 5.0 and 5.7 liter PFI engines.
- **A/J/L/W 87-89 2.8/3.1L PFI FTD Cartridge**
Part No. TK04070A
Tests GMP4 ECM's in 1987-89 GM A, J, L, and W-body vehicles equipped with 2.8 and 3.1 liter PFI engines.
- **L/N/W 88-90 2.3L PFI FTD Cartridge**
Part No. TK04360A
Tests GMP4 ECM's in 1988-90 GM L, N and W-body vehicles equipped with 2.3 liter PFI QUAD 4 engines.
- **1990 3.1/5.0/5.7L PFI FTD Cartridge**
Part No. TK04080
Tests GMP4 ECM's in 1990 GM A, F, J, L and W-body vehicles equipped with 3.1, 5.0, or 5.7 liter PFI QUAD 4 engines.

IV. SPECIAL FUNCTION CARTRIDGES

"Special Function" Cartridges use the TECH 1's unique ability to take measurements and collect data from sources other than the vehicle's ALDL connector. These cartridges enable you to diagnose special problems that develop in the field or perform special purpose testing on selected vehicle subsystems. The cartridges allow you to read specific sensor outputs directly, add extra sensors to monitor certain engine parameters, and control individual actuators directly. Currently available cartridges are shown below.

- **MAF TESTER Cartridge**
Part No. TK06090
Provides for positive fault isolation of Mass Air Flow (MAF) sensors used in 1986 and newer GM vehicles equipped with 2.8, 3.0, and 3.8 liter engines. The cartridge allows you to perform a 14 point calibration test of the sensor while the sensor is installed and operating on the vehicle. Annual up-dating of this cartridge is not required.
- **EE PROM Cartridge**
Part No. TK06030
The TK06030 is a TECH 1 cartridge for reprogramming the erasable prom micro-processor chip in the 1990 Storm and 1990 Corvette. Using data contained in the cartridge, the prom can be programmed with up-to-date memory calibrations.

V. PERIPHERAL INTERFACE CARTRIDGES

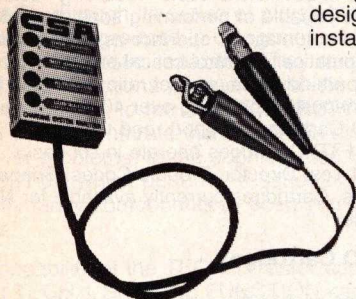
"Peripheral Interface" Cartridges allow you to link your TECH 1 to other devices such as printers, terminals, modems, or personal computer based systems. These cartridges also provide the basic link between the TECH 1 and other diagnostic products within the GM TECHLINE and EXPECTEC families. Peripheral Interface Cartridges currently available are shown below.

- **RS-232C INTERFACE Cartridge**
Part No. TK05030A
The RS-232C Interface Cartridge provides the basic communication link between your TECH 1 and other RS-232C compatible equipment including the TECH 1 printer and the GM T-10 and T-15 Technical Service Information Systems. The cartridge supports the transfer of both real-time vehicle data and as well as "Snapshot" data. The RS-232C Interface Cartridge works with all TECH 1 master cartridges. All functions are easily accessed from select menus.

ENGINE — ELECTRICAL

CHARGING SYSTEM/BATTERY

J 26290-A CHARGING SYSTEM ANALYZER



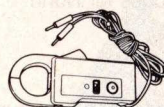
Checks battery condition, regulator performance and pinpoints suspected faulty generator components on SI charging systems. Solid state design with (4) LED's gives instant readout.



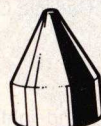
J 23688
HYDRO-SPY °F BATTERY
CONDITION CHECKER
(Featured on page 155)



J 26568
HYDRO-SPY °C BATTERY
CONDITION CHECKER

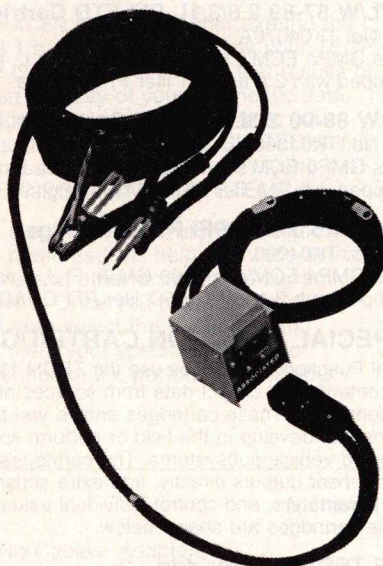


J 35590
CURRENT CLAMP
(0-600 amps)
(Use with J 34029-A)



J 38276
ALTERNATOR BEARING
PULLER ADAPTER
(Use with J 28509A)
Prizm

AE 6139 PLUG-IN STARTING SYSTEM



#1 IN REACH

25 ft. cables reach cars that others leave behind. Used to start more vehicles than any other starting system in the world.

#1 IN FAST STARTS

Only one pair of clamps to connect — other end plugs into socket mounted on service truck. No hood lifting.

#1 IN SAFETY

Plug and socket are polarized so they can't be connected wrong. Patented "Safety Lite" mounted in negative clamp protects operator and vehicle's electronics. Red LEDs light up if a reversed connection is about to be made.

#1 IN QUALITY

- Unbreakable LEXAN® plug can take abuse and temperature extremes
- 500 amp insulated clamps
- Stainless steel cabinet resists corrosion

AE 6036-B CARBON PILE BATTERY TESTER



Tests all sizes and types of automobile, truck and bus batteries.

FEATURES:

- Three carbon piles - 57 discs. More carbon gives longer life.
- High R.P.M. fan gives greater cooling capacity.
- Large scale voltmeter - GOOD/BAD readings.
- Temperature compensation control.

Specifications:

Ammeter6", D'Arsonval movement.
Color-coded, 0-1000 amps.
Voltmeter.....6", D'Arsonval movement.
Color-coded, 0-16 volts.
Leads.....5 feet, 2 AWG
Clamps.....1000 amps (15 second rating).
"Flex-Spring" cable guards.

AE 6009 CHARGER/ BOOSTER

6/12 VOLT
70/60 AMP CHARGE
420 AMP BOOST



Charge all standard and maintenance-free batteries. Four charging rates - three 12 volt, one 6 volt. Easy to see, easy to reach controls save time and effort. Features extra large ammeter with impact resistant cover.

- Stop-Go Lite alternator/microprocessor protection
- UL listed for indoor/outdoor use
- 90 minute timer/overnight charge position

ELECTRONIC CONTROLS

J 36101

SENSOR TESTER

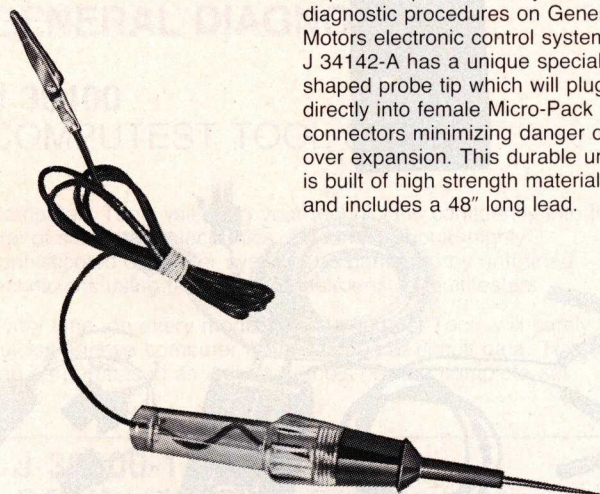
J 36101 provides a method for testing all AC Spark Plug MAF Sensors. J 36101 attaches to the sensor connector and uses the simplicity of an automatic 5 minute pass-fail test procedure to determine the integrity of the sensor.

A multi-position switch allows testing of all 7 different frequency bands of sensors. The tester includes a built-in signal light to assure the technician of a proper connection and indicates the actual testing of the sensor. This eliminates any uncertainty on the validity of the test. The tool has adapters for connection to the vehicle power supply at the cigar lighter receptacle or directly at the battery terminals. J 36101 comes with an application chart and complete operating instructions.

MASS AIR FLOW (MAF)

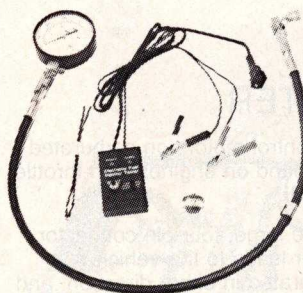


J 34142-B UNPOWERED TEST LIGHT



A test light such as J 34142-A is required to perform many of the diagnostic procedures on General Motors electronic control systems. J 34142-A has a unique specially shaped probe tip which will plug directly into female Micro-Pack connectors minimizing danger of over expansion. This durable unit is built of high strength material and includes a 48" long lead.

J 34730-C PORT FUEL INJECTION DIAGNOSTIC KIT



J 34730-B is used to diagnose and service MFI (Multi-port, Fuel Injection) and SFI (Sequential Fuel Injection) systems on General Motors Vehicles.

The Kit Includes:

J 34730-1

- FUEL PRESSURE GAUGE AND HOSE
A kPa/psi dual scale gauge (0-60 psi) which is used to check fuel pump pressure and compare injectors for equal fuel distribution.

J 34730-2A and J 34730-2B (Featured below)

- TEST LIGHTS

J 34730-3A

• INJECTOR TESTER

Separately energizes each injector to compare for equal fuel impulses over a constant time interval which allows the technician to pinpoint a faulty injector.

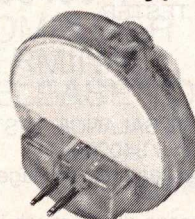
The tools are packaged in a durable plastic case and complete operating instructions are included.

J 34636 ECM CIRCUIT TESTER



Testing of ECM controlled relays and solenoids is very important. A short circuit across any one relay or solenoid, causing low or no resistance, will permanently damage the ECM quad driver circuitry and require replacement of the complete ECM. J 34636 allows the technician to accurately check all relays and solenoids before connecting them to the ECM. The tester measures the circuit resistance and indicates pass or fail via green or red LED's. An amber LED indicates current polarity. The tester can also be used as a non-powered continuity checker.

INJECTOR HARNESS TEST LIGHTS J 34730-2A J 34730-2B (Metro Only)



The J 34730-2A is a specially designed test light which plugs directly into the injector harness and gives a visual indication of the electrical impulses from the ECM. J 34730-2A connects to the system very easily and the special light bulb will shine brighter than a standard 12V test light. (Included with J 34730-C)

ELECTRONIC CONTROLS (CONTINUED)

J 37027-A

IDLE AIR CONTROL MOTOR ANALYZER

(1982-90 PFI/TBI GM Fuel Systems)

J 37027-A inputs a stepper motor signal into the I.A.C. motor allowing an observation of whether the motor subsequently sets correct engine idle speed. The analyzer substitutes for the E.C.M. driving the I.A.C. motor to determine whether a problem exists in the motor or the E.C.M. Since the J 37027-A can control engine idle speed, it is a useful aid for:

- Ignition timing checks
- Cylinder balance checks
- Injector cleaning

Includes J 37027-3

J 37027-3

IDLE AIR CONTROL SYSTEM CHECK LIGHTS (Included with J 37027-A)

J 37027-3 Idle Air Control System Check Lights provide a quick, easy, and accurate means of checking the E.C.M. signal that provides commands to the Idle Air Control Motor for setting proper engine idle speed.

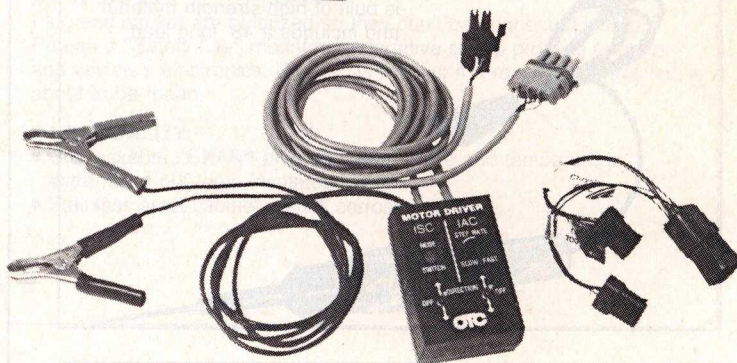
J 37800

IAC/ISC MOTOR TESTER

The new J 37800 tests idle speed control motors on carbureted engines and idle air control motors found on engines with throttle body injection (TBI), including 700 TBI.

- * **ISC MOTOR TEST:** Simply plug the large, four-pin connector into the motor and attach the power leads to the vehicle's battery. The motor can now be operated in either direction, and the condition of the internal switch can be checked with the built-in test light.
- * **IAC MOTOR TEST:** Simply plug either the small, four-pin connector or the four-square pin connector to the IAC motor and the power leads to the vehicle's battery. One switch and variable resistor control IAC motor plunger travel. Used to assure correct functioning and proper response to commands for correct idle speed.

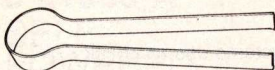
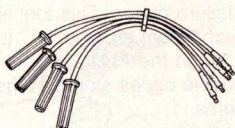
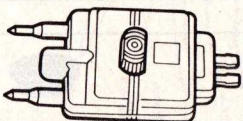
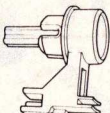
On-vehicle testing will save time by isolating motor failure from system failure immediately.

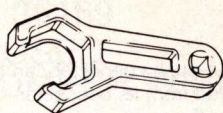
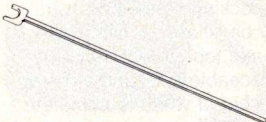
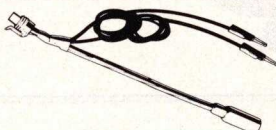


	J 26868 INJECTOR REMOVER
	J 34025-A IDLE SPEED CONTROL MOTOR TESTER
	J 34116 CYLINDER BALANCE TESTER (Used with J 34029-A multimeter featured on page 142) OTo diagnose diesel rough idle conditions

	J 34678-A METERING VALVE SENSOR TEST HARNESS (4.3L V-6 diesel) Used with digital multimeter such as J 34029-A.
	J 35748 OIL PRESSURE SENDING UNIT SOCKET (87 to Current Vehicles w/Gauge Pkg.)
	J 35749 OIL PRESSURE SWITCH SOCKET (87 to Current TBI & PFI Gas Engines)

ELECTRONIC CONTROLS (CONTINUED)

	J 36011 Spark Pug Boot Insulator Remover (Quad 4 Eng.)
	J 36012 IGNITION SYSTEM DIAGNOSTIC HARNESS (Quad 4 Eng.)
	J 36400-1 COMPUSTEST TOOL FOR INJECTOR PULSES (Featured on page 143)
	J 37089-A CRANKSHAFT SENSOR ADJUSTER & BALANCER CHECKER (3300 3.0L/3800 3.8L Engines)

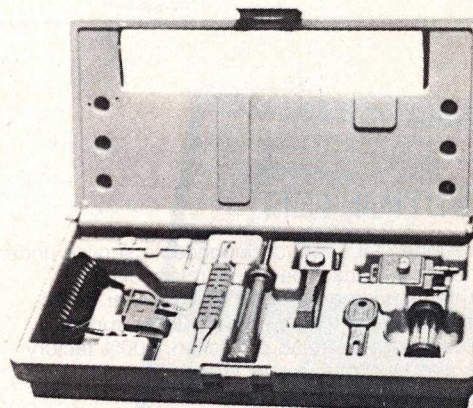
	J 37398 OIL PRESSURE SENDING UNIT WRENCH (Buick & Olds 3.0L N-Car Only)
	J 38491 SPARK PLUG BOOT REMOVAL TOOL (3300/3800 Engines)
	J 38490 TPS ADAPTER HARNESS ('90 Cadillac C-Car)

GENERAL DIAGNOSTIC

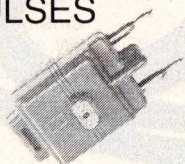
J 36400 COMPUSTEST TOOL SET

Computest Tools will bring your technicians confidently into the age of solid-state electronics. No longer should highly sophisticated computer systems be damaged by untrained technicians using test lights or inexpensive multimeters.

Every time, on every model car, Computest Tools will safely and quickly retrieve computer trouble codes or circuit data. This set can be purchased as individual tools or as a complete set.



J 36400-1 COMPUSTEST TOOL FOR INJECTOR PULSES



Quickly checks injector pulses for both single injector throttle body systems and multi-port fuel injector systems. Plugs into the connector and the light on the tool blinks if the electrical pulses are getting to the injector. (Not for 700 TBI, PFI.)

J 36400-3 FUSE TESTER/INSTALLER

One end checks for faulty fuses while the other end removes and replaces fuses.



J 36400-2 CARBURETOR FUEL CONTROL PULSE CIRCUITS TESTER



This tool will test the computer control pulses on a carbureted engine and trace signals between the computers on the car. Use this tool at the ALDL connector that is provided as a test point.

J 36400-4 COMPUTER TERMINAL RELEASE TOOL

Releases and cleans computer connectors.



ENGINE — ELECTRICAL

GENERAL DIAGNOSTIC (CONTINUED)

J 36400-5 PUSH TERMINAL RELEASE TOOL



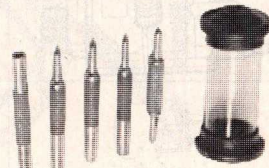
While a push connector can be removed from its connector body with a screwdriver, the interlocking connectors can only be released with a special release tool. It features a replaceable tip. (One extra tip is included with the complete kit).

J 36400-6 TERMINAL JUMPER



GM systems use a "check engine," or "service engine soon" bulb in the instrument cluster to indicate failure codes. This tool is used to jump from terminal "A" to terminal "B" in the ALDL and trigger trouble codes stored in the C-3 systems.

J 36400-7A CONNECTOR EXTENDERS



These extenders allow electrical measurements at the extensions when there are no exposed contact points.

J 34029-A DIGITAL MULTIMETER

The J 34029-A is designed for years of dependable service under the most rugged shop conditions. The single rotary dial incorporates a patented design eliminating friction wear which reduces the life of typical wafer type switches. Other superior design features include extra overload protection, 100% factory testing of all ranges and functions, a specially designed case which seals out contaminants encountered in the field.

Features:

- In Circuit Diode Test
- 0.50% Basic DCV Accuracy
- Easy to Read LCD 0.5" High Digits
- 2000 Hour Battery Life - Standard 9 Volt
- Audible Continuity Beeper
- 22 Mega Ohm Input Impedance
- In Circuit Measurements
- Spare Fuse
- Test Leads With Alligator Clips
- Patented Long Life
- Rotary Dial
- Built-In Multiposition Tilt Bail
- Plastic Storage/Carrying Case
- Complete Instructions

ACCESSORIES FOR J 34029-A

J 34029-15

EZ MINI-HOOK TEST LEAD SET

Contains a red and black 36" long spring-loaded hook end which can be used to fit over up to .059" diameter components when continuous hook up is required.

J 34029-248

DELUXE TEST LEAD KIT

Includes safety designed test leads with push-on probes plus banana plug extensions, insulated alligator clips, extension probe tips, medium size hook type prods, large size hook type prods all in a nylon pouch with velcro closures.

J 34898

HIGH CURRENT SHUNT

J 34898 is an inexpensive calibrated resistance wire which is connected in series with the electrical accessory to be tested and plugged into the J 34029-A Multimeter. The multimeter range switch is set on the 200 MV DC scale. This will provide a direct readout of the accessory current draw in .1 amp increments. From 0 to 99 amps.



J 35590

CURRENT CLAMP

SERVICE PARTS FOR J 34029-A

J 34029-13

Replacement Test Lead Set Consists of:
(Available Separately)

J 34029-14 (2) Alligator Clips

J 34029-18 (2) Probe Tips

J 34029-19 (2) Test Lead Wires

J 34029-20 (2) Banana Plug Extenders

J 34029-21 (1) Storage Pouch

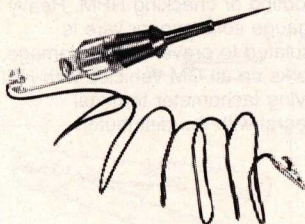
J 34029-2 Molded Storage Case

J 34029-7 Instruction Manual

J 34029-12 Special 2 Amp Fuse (Package of 4)

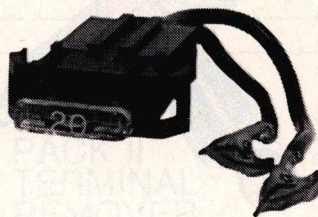
GENERAL DIAGNOSTIC (CONTINUED)

J 21008-A SELF POWERED TEST LIGHT

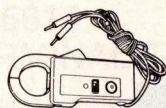


Test for continuity in automotive systems with the power off. Bulb will light if circuit is continuous. Ideal for testing fuses, grounds, shorts, contacts, diodes and open circuits. Tough, durable body. Uses AA 1.5 volt battery. Battery not supplied.

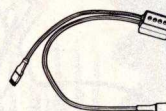
J 36169 FUSED JUMPER WIRE



- In line fuse holder with test leads.
- Provides an easy means of bypassing open circuits.
- Adapts to most GM connectors with a small clamp.



J 35590 CURRENT CLAMP (0-600 amps)



J 35630 HORN TOWER TEST ADAPTER (Featured on page 25)

J 35500 DIGITAL MULTIMETER

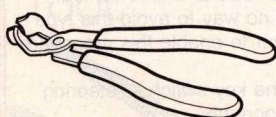
This attractively priced digital multimeter provides the accuracy and features of more expensive meters plus the convenience of autoranging. Simply set the rotary switch to Volts or Resistance and the J 35500 automatically sets the required range.

Features:

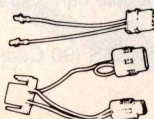
- Autoranging
- 0.50% Basic DCV Accuracy
- 10 Amp AC/DC Capability
- Audible Continuity Beeper
- 10 Mega Ohm Input Impedance
- Low Power Ohm Range For In Circuit Measurements
- Test Leads With Alligator Clips
- Includes Plastic Storage/Carrying Case
- Complete Instructions



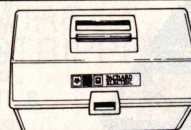
IGNITION SYSTEM



J 21350 SPARK PLUG TERMINAL REMOVER PLIERS



J 24642-85 H.E.I. MODULE TESTER ADAPTER (1985 to current 8 terminal module) Included with J 24642-F



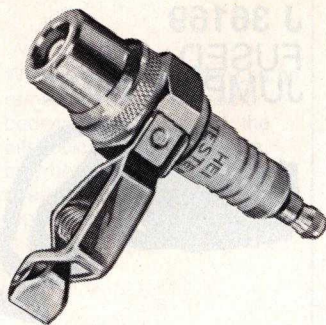
J 38125-A TERMINAL REPAIR KIT (Featured on page 154.)

ENGINE — ELECTRICAL

IGNITION SYSTEM (CONTINUED)

J 26792 H.E.I. SPARK TESTER

Checks for spark output of GM H.E.I. systems without removing spark plug from the engine. Indicates if system is generating acceptable voltage.



J 35812 TACHOMETER ADAPTER

This adapter provides a quick, easy way to hook up your tachometer leads when trouble shooting or checking RPM. Heavy 8-gauge solid copper wire is insulated to prevent short damage. Works on all GM vehicles with HEI having tachometer terminal integral with the distributor.



J 34186 SELF- POWERED INDUCTIVE TIMING LIGHT

The J 34186 Inductive pick-up is simply clamped onto the spark plug wire. Power is supplied by 2 internal "D" cell batteries (included).



J 24642-F HIGH ENERGY IGNITION MODULE TESTER

- Tests all GM High Energy Ignition modules.
- Highly reliable and easy to use.
- GM type-plug on connectors insure quick and accurate tests.
- Verification procedure allows the operation of the tester to be validated periodically.
- Unit is enclosed in a durable, lightweight and completely portable case.
- Step by step instructions with detailed illustrations.
- Includes J 26792 Spark Tester.



J 35628-A VATS/PASS INTERROGATOR



The Vehicle Anti Theft System (VATS), also referred to as the Personal Automotive Security System (PASS), is now standard on the several GM models including:

Cadillac — Allante, Eldorado, Seville

Chevrolet — Corvette, Camaro

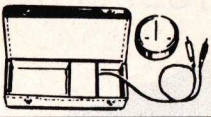

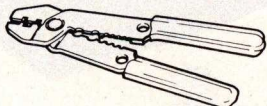
Pontiac — Firebird and Firebird GTA

The J 35628 Interrogator has four distinct and important diagnostic capabilities which include:

1. It will determine the electronic code of a key. If duplicate keys are needed, just insert a key in the Interrogator and it will display the electronic code.
2. If there are no keys for the car, the Interrogator will input each of the 15 codes into the car. When the car starts, the correct code has been found. Because of the design of the system, this can only be done one code at a time (at four minute intervals) on a trial and error basis. There is no way to avoid this type of test. The J 35628-A has a built-in four minute timer to enable this procedure to go as quickly as possible.
3. The Interrogator will determine if there is a fault in the key switch or steering column by reading the key code through these components.
4. A fault downstream of the column or in the VATS/PASS Module can also be diagnosed with the Interrogator.

J 35628-A includes J 35628-90 PASS/VATS ADAPTER HARNESS (90 Cadillac C-Car 91 Buick & Oldsmobile C-Car)

WIRING HARNESS

	J 8681-A UNIVERSAL SHORT CHECKER
	J 22727 TERMINAL REMOVER
	J 25563 WIRE CUTTER, STRIPPER & CRIMPER

	J 37465-1 MINI, MICRO-PAK TERMINAL REMOVER
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J 28742-A WEATHER- PACK II TERMINAL REMOVER

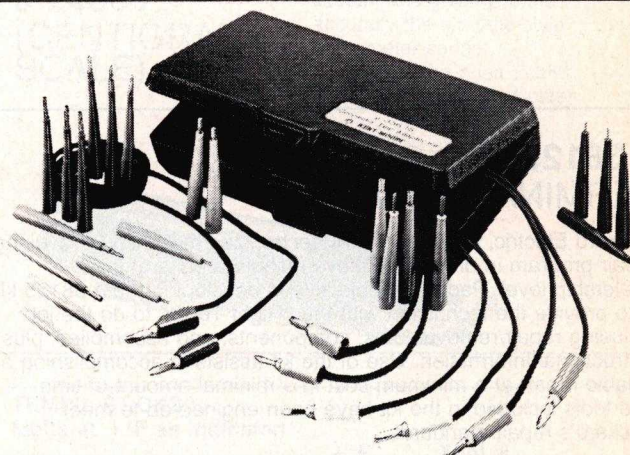
J 28742-A allows easy removal of the Weather Pack II terminals. Included is a protective cap for the precision thin wall tubular end of the tool.



J 35616 TERMINAL TEST ADAPTER KIT

Designed specifically for GM but with application on many vehicles.

This adapter set contains an assortment of flexible connectors to adapt a multimeter or jumper cords to Packard Weather-Pack, Metri-Pack and Micro-Pack terminal. Includes 22 color coded flexible connectors and 4 color coded patch cords packaged in a convenient storage case. For CCC systems & other electronic components. A professional quality product that is a must for electronic diagnostic technicians. Patent # 4708667.



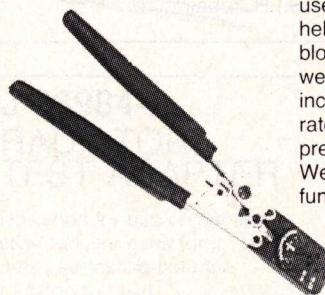
J 33095 TERMINAL REMOVER MICRO-PACK COM-PACK III AND ECM EDGE BOARD CONNECTORS

General Motors Vehicles with Electronic engine controls incorporate Micro-Pack, Com-Pack III and ECM Edge Board Connectors on the wiring harnesses. J 33095 is designed to allow easy removal of the terminals when servicing these connectors.



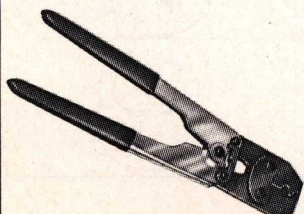
J 35606 WEATHER-PAC TERMINAL CRIMPER

J 35606 simultaneously crimps the wire to terminal and terminal to Weather-Pack Boot; very easy to use. Wire, terminal, and boot are held in alignment by the guide block ensuring accurate and weather-tight crimps. Tool incorporates a self-releasing ratchet for consistent application pressure. Maintains integrity of the Weather-Pack design and function.



J 35603 TERMINAL CRIMPING TOOL

This quality crimping tool is designed to crimp many Packard terminals and the new wire splices which are being supplied with some General Motors service connector kits. Its compound leverage design provides a smooth crimping action with a minimum amount of effort.



J 35615 AUTOMATIC WIRE STRIPPER

J 35615 strips 8 to 22 gauge solid or stranded wire quickly, without crushing, nicking, or damaging the wire. Simply squeeze the handles to strip and remove the insulation.

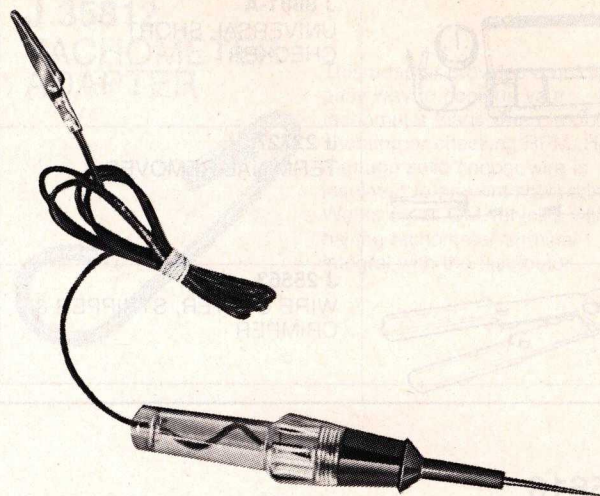


WIRING HARNESS (CONTINUED)

J 34142-B

UNPOWERED TEST LIGHT (MICRO-PACK COMPATIBLE)

A test light such as J 34142-A is required to perform many of the diagnostic procedures on General Motors electronic control systems. J 34142-A has a unique specially shaped probe tip which will plug directly into female Micro-Pack connectors minimizing danger of over expansion. This durable unit is built of high strength material and includes a 48" long lead.



J 38125

TERMINAL REPAIR KIT

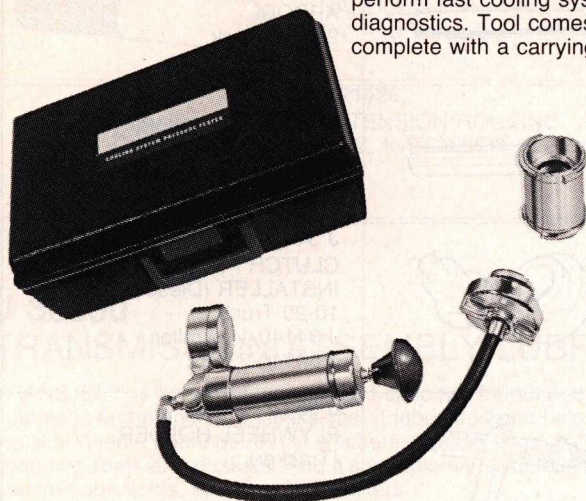
Packard Electric, Division of GM, recognized the need for a wiring repair program in order to achieve reliable repairs at the dealership level. Packard's objective in developing the J 38125 kit is to provide the technician with the "Right Tools" to do the job including repair/removal tools, components, and assemblies, plus instructional information. Use of the kit assists in accomplishing a reliable repair at a minimum cost in a minimal amount of time. The tools included in the kit have been engineered to meet Packard's repair standards.

One important feature of J 38125 is that it contains the proper tools and components to complete wiring repairs on the GM Corporate Supplemental Inflatable Restraint System (S.I.R.) used in 1989 Cadillac C-Cars and numerous future applications including C, E, F, K, L, and V-Cars. Special gold plated terminals and wire leads plus a heat torch and crimping tool for sealed splice sleeves are all required for S.I.R. repair.



J 24460-01 COOLING SYSTEM TESTER

This universal cooling system and cap pressure tester enables the technician to perform fast cooling system diagnostics. Tool comes complete with a carrying case.



	J 36998 WATER PUMP BEARING SERVICE KIT (Quad 4 Eng.)
	J 37097 MUBEA HOSE CLAMP TOOL C/H Car

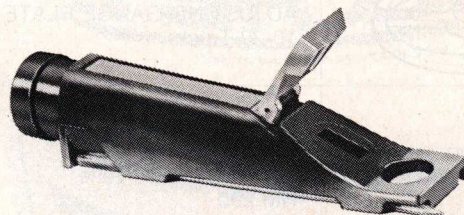
COOLANT TESTERS

J 23688 (FAHRENHEIT SCALE)

J 26568 (CENTIGRADE SCALE)

By placing a few drops of radiator coolant or battery fluid on the instrument and looking into the eye piece a direct reading in degrees of antifreeze protection or battery condition will be obtained. Tests both old and new types of coolant and gives you the accuracy the old bulb style hydrometer cannot.

J 23688 (Fahrenheit Scale)
J 26568 (Centigrade Scale)



	J 23699 OVERFLOW TUBE PRESSURE TEST ADAPTER (Use with J 24460-01)
	J 24460-100 QUICK FILL ADAPTER CAP Used with the J 24460-01 Radiator Cap and Cooling System Tester.
	J 28428-D BLACK LIGHT LEAK DETECTOR Includes 6 - 1 oz. containers of fluorescent oil additive.
	J 29545 COOLANT SYSTEM FLUORESCENT ADDITIVE (24 1 oz. Containers - Use with J 28428-D featured on page 104)
	J 29786 WATER PUMP PULLEY INSTALLER
	J 33419-A RADIATOR CORE REMOVER/INSTALLER
	J 34689 WATER PUMP PULLEY REMOVER (Diesel Only)
	J 36649 COOLING SYSTEM ADAPTER LeMans

TEMPIL STICKS

Melts at +°F as indicated

	+°F	Tool #
	175°	J 24731-175
	188°	J 24731-188
	200°	J 24731-200
	206°	J 24731-206
	213°	J 24731-213
	231°	J 24731-231
	250°	J 24731-250

J 33984-A RADIATOR TEST ADAPTER

Designed for use on smaller style radiator caps for pressure testing both the radiator and cap.



L 20900 RADIATOR CAP PLIERS

Fast Removal of all Standard Radiator Caps

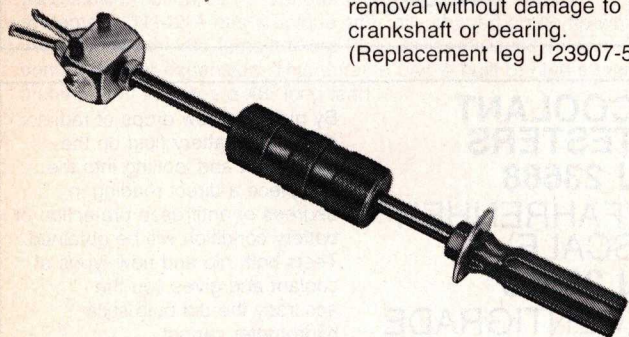
Simply engage the pliers over the cap, press down, rotate and release EASY! Tool fits all standard radiator caps.



MANUAL TRANSMISSION

CLUTCH

J 23907 CLUTCH PILOT BEARING REMOVER



The pilot bearing is removed from the crankshaft using this slide hammer puller with the engine in the vehicle. J 23907 fits inside the bearing bore for removal without damage to the crankshaft or bearing. (Replacement leg J 23907-5)

	J 1048 CLUTCH SPRING ADJUSTING GAUGE PLATE 10-20 Truck
	J 5824-01 CLUTCH ALIGNMENT ARBOR 10-20 Truck, Corvette HM 290
	J 24547 CLUTCH ALIGNMENT ARBOR 1.8L Chevette and T-1000
	J 26516-A CLUTCH PILOT BEARING INSTALLER Chevette, T-1000 and S-Truck (Use with J 8092)
	J 28449 CLUTCH ADJUSTMENT GAUGE Chevette and T-1000


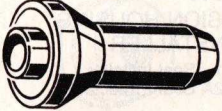
	J 33034 CLUTCH ALIGNMENT ARBOR 2.0L S-Truck
	J 33169 CLUTCH ALIGNMENT ARBOR (4 speed 1.5 & 1.9L & 2.2L diesel) Corvette, Chevette, T-1000 and S-Truck
	J 34140 CLUTCH PILOT BEARING INSTALLER (Diesel) 10-20 Truck J 34140-1 Installer J 34140-2 Pilot
	J 35271 FLYWHEEL HOLDER (Tracker)
	J 35282 CLUTCH ALIGNMENT ARBOR (Geo Storm)
	J 37761 CLUTCH ALIGNMENT ARBOR (Tracker)
	J 37764 PILOT BEARING REMOVER ADAPTER (Tracker)

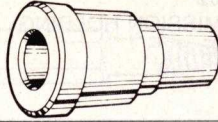
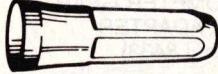
76MM 4-SPEED F CAR

	J 8092 UNIVERSAL DRIVER HANDLE (3/4" - 10 Thread)
	J 21426 EXTENSION HOUSING SEAL INSTALLER

	J 23062-14 EXTENSION HOUSING BUSHING REMOVER AND INSTALLER (Use with J 8092)
	J 23096 FRONT HOUSING DRIVE GEAR SEAL INSTALLER

70MM 4-SPEED CHEVETTE & T-1000

	J 8092 UNIVERSAL DRIVER HANDLE (3/4" - 10 Thread)
	J 21426 EXTENSION HOUSING SEAL INSTALLER

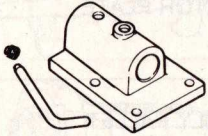
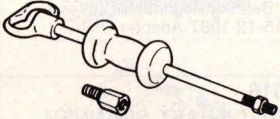
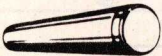
	J 23062-14 EXTENSION HOUSING BUSHING REMOVER AND INSTALLER (Use with J 8092)
	J 23096 FRONT HOUSING DRIVE GEAR SEAL INSTALLER



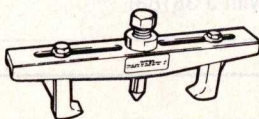
J 36850 TRANSMISSION ASSEMBLY LUBRICANT

TRANSJEL™ is an assembly lubricant specially formulated for automatic and manual transmissions. It lubricates and helps hold in place needle bearings, thrust washers, sealing rings, "O" rings, hydraulic seals and gaskets. And it's completely soluble in transmission fluids, so it won't clog filters.




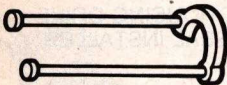
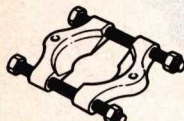


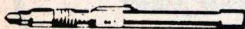
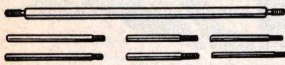
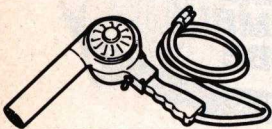
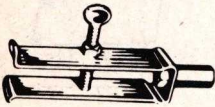
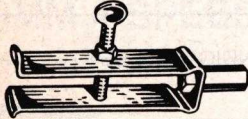
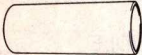
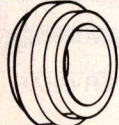
HM 290 (5LM60) 5-SPEED

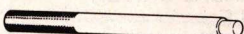
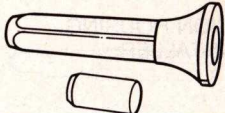
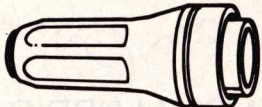
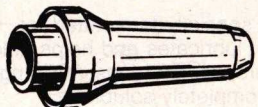
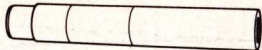
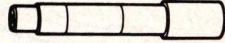
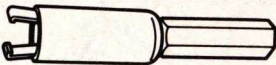
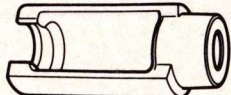
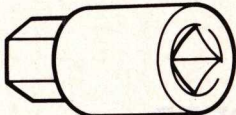
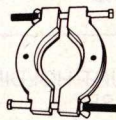
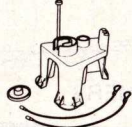
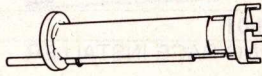
	J 3289-20 BENCH MOUNT HOLDING FIXTURE BASE
	J 6125-B SLIDE HAMMERS
	J 6133-01 BEARING RACE INSTALLER

	J 8001 DIAL INDICATOR SET
	J 8092 DRIVER HANDLE
	J 8433 SPEEDOMETER GEAR PULLER

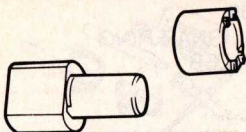


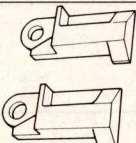
MANUAL TRANSMISSION

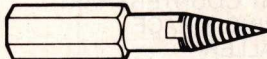
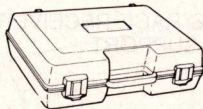
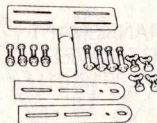
HM 290 (5LM60) 5-SPEED (CONTINUED)

	J 8763-02 TRANSMISSION HOLDING FIXTURE
	J 21427-01 SPEEDOMETER GEAR PULLER ADAPTER (Use with J 8433)
	J 22912-01 SEPARATOR PLATE
	J 23907 SLIDE HAMMER (Featured on page 156)
	J 24420-B GEAR PULLER
	J 24731-250 250° TEMPIL STICK TEMPERATURE INDICATING CRAYON
	J 25025-B DIAL INDICATOR STAND AND GUIDE PIN SET
	J 25070 HEAT GUN
	J 26941 2 WD OUTPUT SHAFT OIL SEAL REMOVER
	J 29369-2 INPUT SHAFT BEARING RETAINER OIL SEAL REMOVER
	J 36183 PRESS TUBE
	J 36184 PRESS TUBE REDUCER (Use With J 36183)

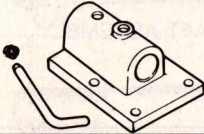
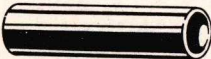


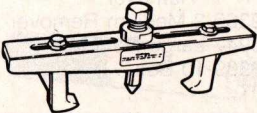
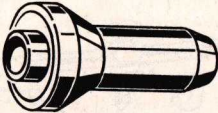
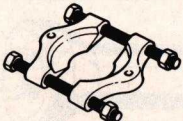
	J 36190 DRIVER HANDLE
	J 36502-A EXTENSION HOUSING SEAL INSTALLER J 36502-1 Seal Installer J 36502-2A Seal Protector
	J 36503 EXTENSION HOUSING SEAL INSTALLER
	J 36504 INPUT SHAFT SEAL INSTALLER
	J 36506 FIFTH AND REVERSE DETENT BUSHING REMOVER AND INSTALLER (Use With J 36190)
	J 36507 SHIFT SHAFT DETENT BUSHINGS REMOVER AND INSTALLER (Use With J 36190)
	J 36509 DETENT SPRING PLUG REMOVER (Use With J 23907)
	J 36510 CLUTCH PIVOT REMOVER AND INSTALLER (Use With J 36190)
	J 36511 OIL FILL/DRAIN PLUG HEX BIT (17mm)
	J 36513 GEAR AND BEARING SEPARATOR PLATE
	J 36515 ASSEMBLY PALLET J 36515-10 2WD Output Shaft Bearing Alignment Cables J 36515-12 1987 Adapter
	J 36516 OUTPUT SHAFT SPANNER NUT WRENCH

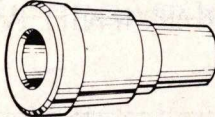

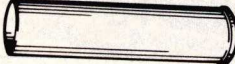

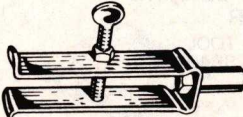
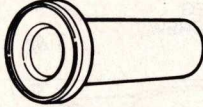
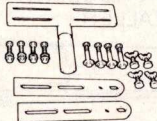
HM 290 (5LM60) 5-SPEED (CONTINUED)

	J 36798 SHIFT RAIL BUSHING INSTALLING AND STAKING TOOL (Use With J 36190)
	J 36799 COUNTERSHAFT END PLAY ADJUSTMENT TOOL (Use With J 8092)
	J 36800 SHIFT RAIL BUSHING REMOVER (Use With J 23907)
	J 36824 TRANSMISSION HOLDING FIXTURE ADAPTERS (Use With J 3289-20 & J 8763-02) J 36824-1 One Adapter

	J 36825 OUTPUT SHAFT OIL SEAL REMOVER (Use With J 23907)
	J 36826 TOOL STORAGE CASE
	J 36842 HOLDING FIXTURE (Use With J 3289-20)

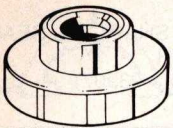
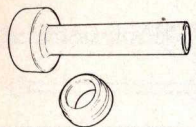
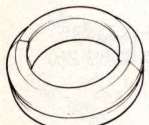
BORG-WARNER T-5

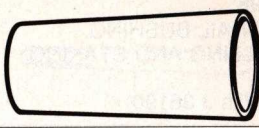
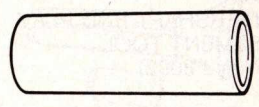
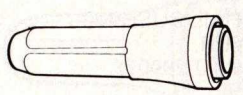
	J 3289-20 BENCH MOUNT HOLDING FIXTURE BASE
	J 5590 MAINSHAFT SUPPORT
	J 6133-01 INPUT BEARING INSTALLATION TUBE (Use With J 22912-01)
	J 8092 UNIVERSAL DRIVER HANDLE
	J 8433 GEAR PULLER
	J 21426 EXTENSION HOUSING SEAL INSTALLER
	J 22912-01 SPLIT PLATE

	J 23062-14 BEARING AND BUSHING REMOVER (Use With J 8092)
	J 23907 SLIDE HAMMER (Featured on page 156)
	J 25234 GEAR INSTALLER
	J 26941 EXTENSION HOUSING SEAL REMOVER (Use With J 23907)
	J 29369-2 INPUT SEAL REMOVER (Use With J 23907)
	J 29895 COUNTERSHAFT REAR BEARING INSTALLER
	J 36842 TRANSMISSION HOLDING FIXTURE (Use With J 8092)

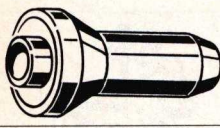
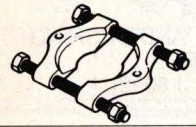
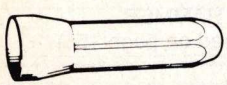
MANUAL TRANSMISSION

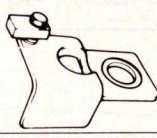
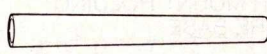
BORG-WARNER T-5 (CONTINUED)

	J 37357 FRONT COUNTERSHAFT BEARING & RACE INSTALLER (Use With J 8092)
	J 37358 BEARING RACE RECEIVER & CASE SUPPORT
	J 37359 FRONT CRANKSHAFT BEARING REMOVER (Use With J 22912-01)

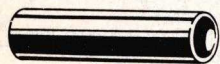

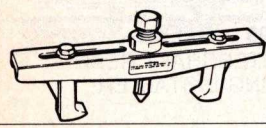
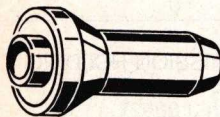
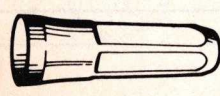
	J 37360 SPIRAL SNAP RING INSTALLER
	J 37372 SYNCHRONIZER & GEAR INSTALLER
	J 37375 BEARING RETAINER SEAL INSTALLER

69.5MM 5-SPEED CHEVETTE & T-1000

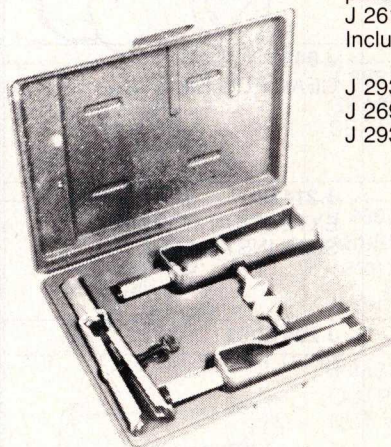
	J 21426 EXTENSION HOUSING SEAL INSTALLER
	J 22912-01 BEARING AND GEAR PULLER
	J 26540 FRONT HOUSING DRIVE GEAR SEAL INSTALLER

	J 29768 TRANSMISSION HOLDING FIXTURE
	J 33851 MAINSHAFT ASSEMBLY TOOL

83MM 4-SPEED CORVETTE

	J 5590 MAINSHAFT FRONT BEARING INSTALLER
	J 6654-01 FRONT BEARING PULLER J 6654-2 TOOL J 8157-1 SPACER
	J 8433 UNIVERSAL PULLER BAR J 8433-2 LEG J 8433-3 SCREW
	J 21426 EXTENSION HOUSING SEAL INSTALLER
	J 23096 FRONT HOUSING DRIVE GEAR SEAL INSTALLER


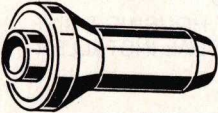
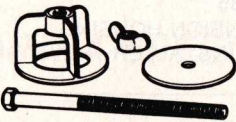
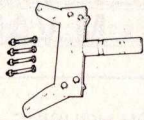
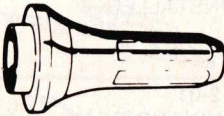


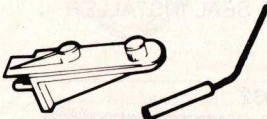
J 29369 BUSHING REMOVER SET

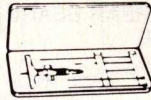
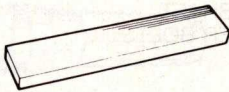
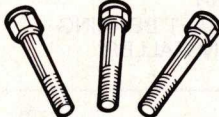



This universal set includes a small, medium, & large expandable collet type bushing puller and is used with J 2619-01 Slide Hammer. Includes: J 29369-1 Small Remover
J 29369-2 Medium Remover
J 26941 Large Remover
J 29369-10 Box

MANUAL TRANSMISSION

AUTOMATIC OVERDRIVE CORVETTE 1984 TO CURRENT

	J 8001 DIAL INDICATOR SET (.001" graduations - .200" Travel)
	J 21426 EXTENSION HOUSING SEAL INSTALLER
	J 23327 CLUTCH SPRING COMPRESSOR J 23327-1 Bridge J 23327-2 Bolt & Wing Nut J 21420-2 Plate
	J 34162-A HOLDING FIXTURE (Use with J 3289-20)
	J 34523 FRONT COVER SEAL INSTALLER
	J 34529 VALVE BODY SPRING COMPRESSOR
	J 34621 FRONT COVER SEAL PROTECTOR
	J 34671 THROTTLE SETTING GAUGE

	J 34672 DEPTH MICROMETER
	J 34673 FLAT GAUGE BAR
	J 34681-A PRESSURE PLATE RETAINING BOLTS
	J 34742 AIR LINE ADAPTER

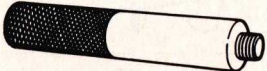
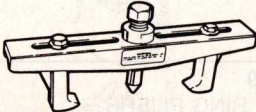
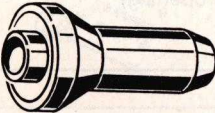
J 34752 CORVETTE AUTOMATIC OVERDRIVE KIT

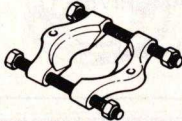
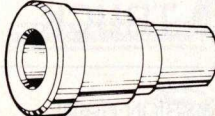



Consists of:

- J 34523** Front Cover Seal Installer
- J 34529** Valve Body Spring Compressor
- J 34621** Front Cover Seal Protector
- J 34681** Clutch Pack Holding Bolts
- J 34742** Air Line Adapter
- J 34671** Throttle Valve Setting Gauge
- J 34672** Depth Micrometer
- J 34673** Gauge Bar
- J 34752-1** Special Storage Case

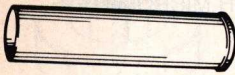
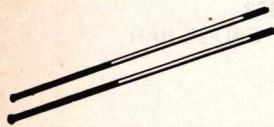
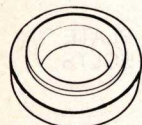
77MM 4-SPEED S & T TRUCK

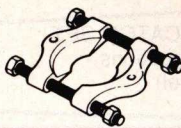
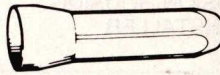
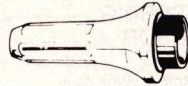
	J 8092 UNIVERSAL DRIVER HANDLE (3/4" - 10 Thread)
	J 8433 UNIVERSAL PULLER BAR J 8433-2 Leg J 8433-3 Screw
	J 21426 EXTENSION HOUSING SEAL INSTALLER

	J 22912-01 BEARING AND GEAR PULLER
	J 23062-14 EXTENSION HOUSING BUSHING REMOVER AND INSTALLER (Use With J 8092)
	J 23096 FRONT HOUSING DRIVE GEAR SEAL INSTALLER

MANUAL TRANSMISSION

77MM 4-SPEED S & T TRUCK (CONTINUED)

	J 25234 FRONT & REAR BEARING INSTALLER
	J 33171 MAINSHAFT PULLER BOLTS
	J 8853-01 MAINSHAFT BEARING RACE INSTALLER

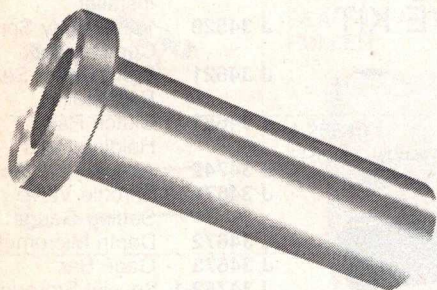
	J 22912-01 BEARING AND GEAR PULLER
	J 26540 FRONT HOUSING DRIVE GEAR SEAL INSTALLER
	J 33035 EXTENSION HOUSING SEAL INSTALLER



77MM 5-SPEED CHEVETTE, T-1000 & F CAR - S & T TRUCK - M VAN

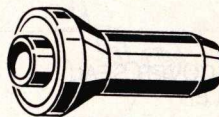
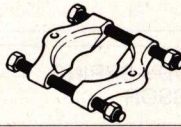
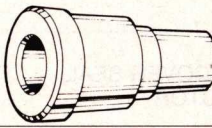
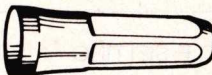
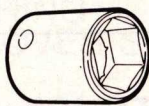
J 29895

COUNTERSHAFT REAR BEARING INSTALLER

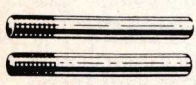
This tool, when used with J 33032, installs the bearing to the correct position on the countershaft.




	J 8001 DIAL INDICATOR SET (.001" graduations - .200" Travel)
	J 8092 UNIVERSAL DRIVER HANDLE (3/4" - 10 Thread)

	J 21426 EXTENSION HOUSING SEAL INSTALLER
	J 22912-01 BEARING AND GEAR PULLER
	J 23062-14 EXTENSION HOUSING BUSHING REMOVER AND INSTALLER (Use With J 8092)
	J 23096 FRONT HOUSING DRIVE GEAR SEAL INSTALLER
	J 33032 REAR CLUSTER BEARING ASSEMBLY TOOL


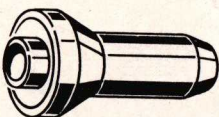
76MM 3-SPEED 10 - 20 TRUCK

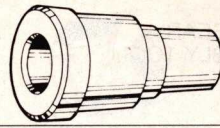
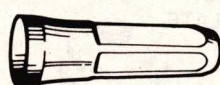
	J 1126 TRANSMISSION GUIDE PINS
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	J 8059 SNAP RING PLIERS (Parallel opening)
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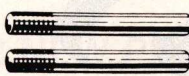

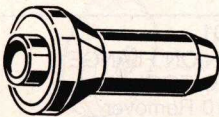
MANUAL TRANSMISSION

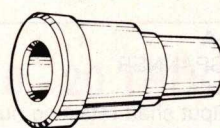
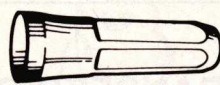
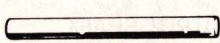
76MM 3-SPEED 10 - 20 TRUCK (CONTINUED)

	J 8092 UNIVERSAL DRIVER HANDLE (3/4" - 10 Thread)
	J 21426 EXTENSION HOUSING SEAL INSTALLER


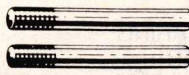
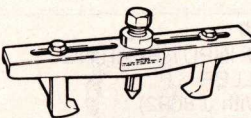

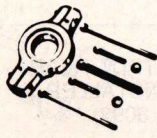
	J 23062-14 EXTENSION HOUSING BUSHING REMOVER AND INSTALLER (Use With J 8092)
	J 23096 FRONT HOUSING DRIVE GEAR SEAL INSTALLER

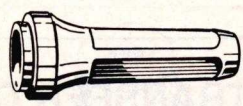


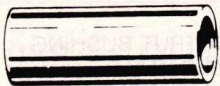
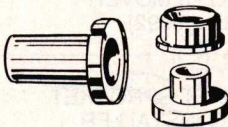
89MM 4-SPEED 10 - 20 TRUCK

	J 1126 TRANSMISSION GUIDE PINS
	J 8059 SNAP RING PLIERS (Parallel opening)
	J 21426 EXTENSION HOUSING SEAL INSTALLER

	J 23062-14 EXTENSION HOUSING BUSHING REMOVER AND INSTALLER (Use With J 8092)
	J 23096 FRONT HOUSING DRIVE GEAR SEAL INSTALLER
	J 29793 COUNTERSHAFT GEAR ALIGNMENT TOOL

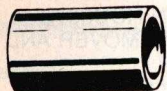
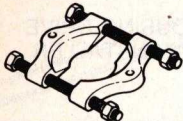
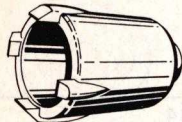
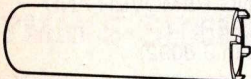
117MM 4-SPEED 10 - 20 TRUCK

	J 358-1 BEARING REMOVER HOLDER
	J 1126 TRANSMISSION GUIDE PINS
	J 8433 UNIVERSAL PULLER BAR J 8433-2 Leg J 8433-3 Screw
	J 22830-A SNAP RING INSTALLER
	J 22832-01 COUNTER GEAR & MAINSHAFT REAR BEARING REMOVER J 22832-1 Retainer J 22832-2 Screw

	J 22833 FRONT HOUSING DRIVE GEAR SEAL INSTALLER
	J 22834 EXTENSION HOUSING SEAL INSTALLER J 22834-1 Spacer J 22834-2 Installer
	J 22872 DRIVE GEAR BEARING REMOVER
	J 22873 MAINSHAFT BUSHING INSTALLER
	J 22874 REAR MAIN AND COUNTERSHAFT BEARING INSTALLER J 22874-1 Installer J 22874-2 Countershaft Stop J 22874-5 Mainshaft Stop

MANUAL TRANSMISSION

117MM 4-SPEED 10 - 20 TRUCK (CONTINUED)

	J 22875 THIRD GEAR ASSEMBLY TOOL
	J 22912-01 SPLIT PLATE
	J 23070 MAINSHAFT REAR LOCK NUTWRENCH - K Series
	J 35907-A 117MM SPANNER WRENCH (Rear output shaft retaining nut)


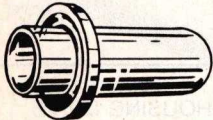
J 28509-A COUNTER GEAR BEARING REMOVER

To remove the Counter Gear Front bearing, this two jawed puller has the needed strength to remove the tightest bearings quickly.




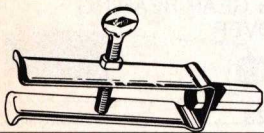

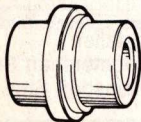
205 NEW PROCESS TRANSFER CASE,


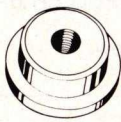
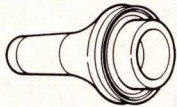
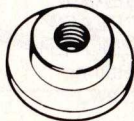
30 Series K Through 1987
30 Series V 1987 - Current

	J 22875 REAR OUTPUT SHAFT REAR BEARING INSTALLER
	J 21359 REAR OUTPUT SHAFT BEARING RETAINER SEAL INSTALLER

	J 8614-01 COMPANION FLANGE HOLDING TOOL J 8614-10 Remover J 8614-2 Adapter J 8614-3 Screw
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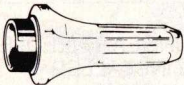
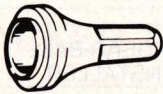
207 NEW PROCESS TRANSFER CASE - T TRUCK

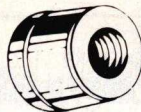

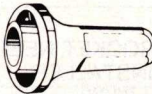
	J 8092 UNIVERSAL DRIVER HANDLE (3/4" - 10 Thread)
	J 29369-1 OUTPUT SHAFT BEARING REMOVER (Use with J 2619-01)
	J 33826 REAR OUTPUT BUSHING INSTALLER AND MAINSHAFT SPROCKET BEARING REMOVER (Use With J 8092)
	J 33828 MAINSHAFT SPROCKET BEARING INSTALLER (Use With J 8092)

	J 33829 PILOT BEARING INSTALLER (Use With J 8092)
	J 33830 FRONT INPUT BEARING INSTALLER (Use With J 8092)
	J 33831 INPUT SEAL INSTALLER
	J 33832 FRONT OUTPUT REAR BEARING INSTALLER (Use With J 8092)

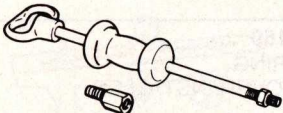
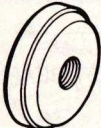
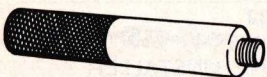

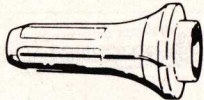

MANUAL TRANSMISSION

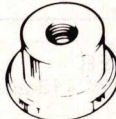




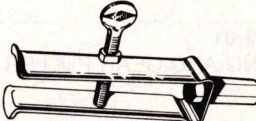
207 NEW PROCESS TRANSFER CASE - T TRUCK (CONTINUED)

	J 33833 OUTPUT MAIN BEARING INSTALLER (Use With J 8092)
	J 33834 FRONT OUTPUT SEAL INSTALLER
	J 33835 PUMP HOUSING SEAL INSTALLER

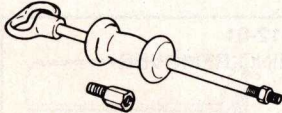
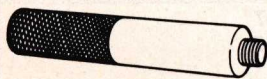
	J 33839 REAR OUTPUT BUSHING REMOVER (Use With J 8092)
	J 33841 FRONT INPUT BEARING REMOVER (Use With J 8092)
	J 33843 EXTENSION HOUSING SEAL INSTALLER

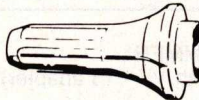

208 NEW PROCESS TRANSFER CASE 10 - 20 TRUCK K Truck Through 1987 V Truck 1987 - Current

	J 2619-01 SLIDE HAMMER (5/8" - 18 with 1/2" - 13 Adapter)
	J 7818 REAR OUTPUT SHAFT BEARING INSTALLER (Use With J 8092)
	J 8092 UNIVERSAL DRIVER HANDLE (3/4" - 10 Thread)
	J 26941 NEEDLE BEARING PULLER (Use With J 2619-01)
	J 26162 REAR RETAINER SEAL INSTALLER
	J 29163 FRONT OUTPUT SHAFT REAR BEARING INSTALLER (Use With J 8092)

	J 29167 FRONT OUTPUT SHAFT FRONT BEARING INSTALLER (Use With J 8092)
	J 29168 FRONT OUTPUT SHAFT FRONT BEARING REMOVER (Use With J 8092)
	J 29169 INPUT GEAR BEARING INSTALLER (Use With J 8092)
	J 29170 INPUT GEAR BEARING REMOVER (Use With J 8092)
	J 29174 MAINSHAFT BEARING INSTALLER (Use With J 8092)
	J 29369-1 OUTPUT SHAFT BEARING REMOVER (Use With J 2619-01)

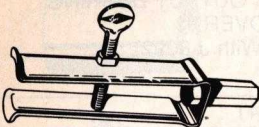
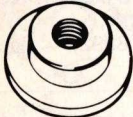

241 NEW PROCESS TRANSFER CASE 1988 — CURRENT K TRUCK

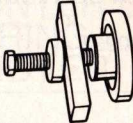
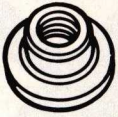
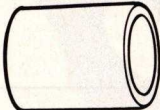
	J 2619-01 SLIDE HAMMER (5/8" - 18 with 1/2" - 13 adapter)
	J 8092 UNIVERSAL DRIVER HANDLE 3/4" - 10 Thread

	J 29162 FRONT OUTPUT SHAFT AND REAR RETAINER OIL SEAL INSTALLER
	J 29163 FRONT OUTPUT SHAFT REAR BEARING INSTALLER (Use With J 8092)

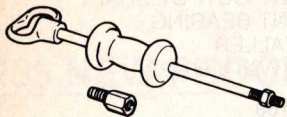
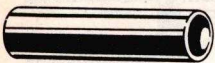


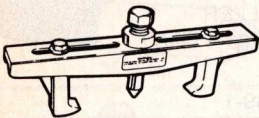
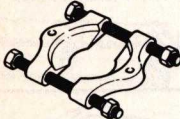
MANUAL TRANSMISSION


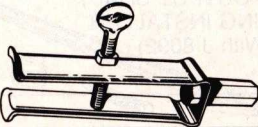
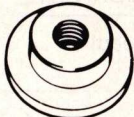
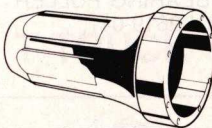
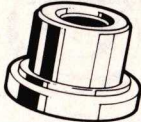
241 NEW PROCESS TRANSFER CASE 1988 — CURRENT K TRUCK (CONTINUED)

	J 29369-1 NEEDLE BEARING (Use With J 2619-01)
	J 33832 BEARING REMOVER (Use With J 8092)
	J 36370 DRIVE SPROCKET NEEDLE BEARING INSTALLER (Use With J 8092)

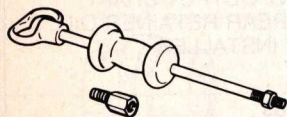
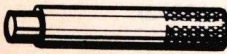
	J 36371 FRONT AND REAR OUTPUT SHAFT BEARING INSTALLER
	J 36372 INPUT SUNGEAR NEEDLE BEARING INSTALLER (Use With J 8092)
	J 36373 INPUT SUNGEAR BALL BEARING INSTALLER

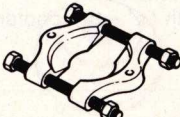

1370/4470 BORG-WARNER K30 SERIES

	J 2619-01 SLIDE HAMMER ($\frac{5}{8}$ " - 18 with $\frac{1}{2}$ " - 13 adapter)
	J 5590 INSTALLER
	J 8059 SNAP RING PLIERS
	J 8092 DRIVER HANDLE
	J 8433 PULLER
	J 22912-01 BEARING AND GEAR PULLER

	J 29169 BEARING REMOVER/INSTALLER
	J 29369-1 OUTPUT SHAFT BEARING REMOVER
	J 33832 BEARING REMOVER/INSTALLER
	J 37668-A SEAL INSTALLER
	J 37669 NEEDLE BEARING INSTALLER

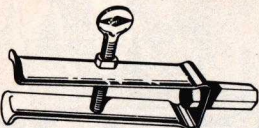
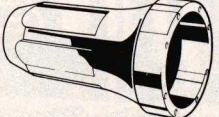
4472 BORG-WARNER L VAN

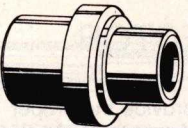

	J 2619-01 SLIDE HAMMER ($\frac{5}{8}$ " - 18 with $\frac{1}{2}$ " - 13 adapter)
	J 7079-2 DRIVER HANDLE

	J 22912-01 BEARING REMOVER
	J 23907 PULLER


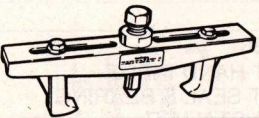




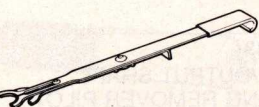
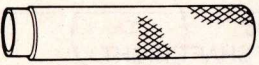
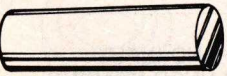
MANUAL TRANSMISSION


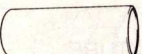
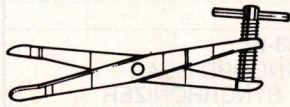
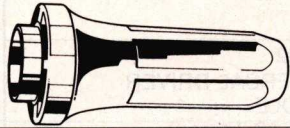
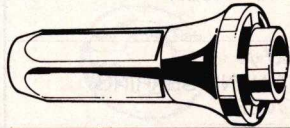
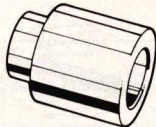
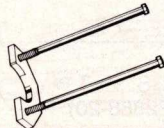
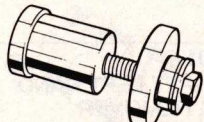
4472 BORG-WARNER L VAN (CONTINUED)

	J 29369-1 OUTPUT SHAFT BEARING REMOVER
	J 37668-A SEAL INSTALLER

	J 38212 NEEDLE BEARING INSTALLER
	J 38216 SEAL INSTALLER

TRACKER TRANSFER CASE

	J 6133-01 INPUT GEAR BEARING INSTALLER
	J 8433 BEARING PULLER
	J 22912-01 SPLIT PLATE
	J 23907 SLIDE HAMMER
	J 26941 NEEDLE BEARING PULLER
	J 28406 INPUT GEAR BEARING REMOVER
	J 34757 OUTPUT SHAFT RING REMOVER
	J 34844 FRONT SHAFT BEARING REMOVER
	J 35664 PRESS TUBE/BEARING INSTALLER

	J 35871 INPUT GEAR INSTALLER
	J 36183 OUTPUT REAR SHAFT INSTALLER
	J 37637 CASE SEPARATOR
	J 37751 OIL SEAL INSTALLER
	J 37752 OIL SEAL INSTALLER
	J 37753 BEARING INSTALLER
	J 37756 OUTPUT SHAFT BEARING PULLER ADAPTER
	J 37757 NEEDLE BEARING INSTALLER

MANUAL TRANSAXLE

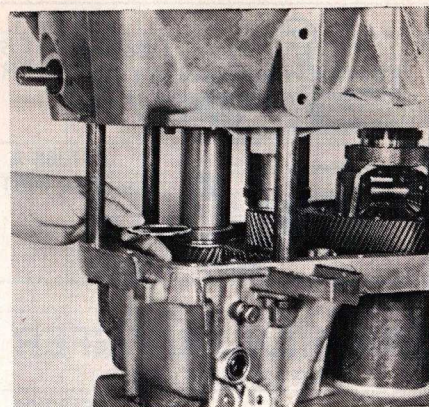
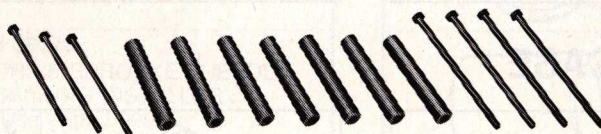
FX125 AND FX170 4-SPEED

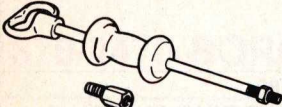
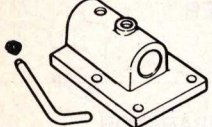

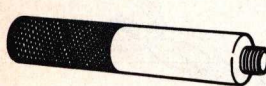

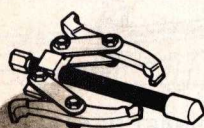
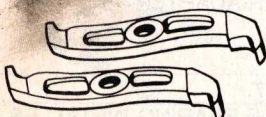
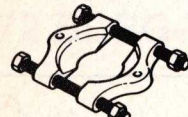
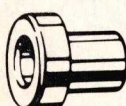
J 26935



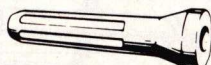


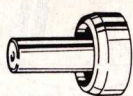
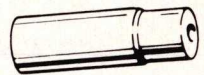


TRANSAXLE SHIM SELECTOR

The FX125 and FX170 manual transaxles utilize tapered roller bearings that require the use of shims to provide the proper bearing preload. Since there is no external means of checking for proper shim selection after the case is assembled, the use of this shim selector is very important. This tool provides the technician with a direct method of selecting the proper shim, thus eliminating any mathematical computations or the use of a dial indicator.



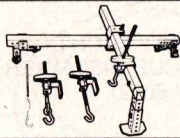

U.S. Patent No. D257, 960

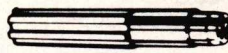
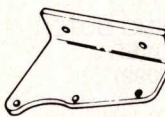


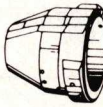


	J 2619-01 SLIDE HAMMER ($\frac{5}{8}$ " - 18 Thread with $\frac{1}{2}$ " - 13 Adapter)
	J 3289-20 HOLDING FIXTURE BASE
	J 6133-01 1ST/2ND/3RD GEAR & 1-2 SYNCHRONIZER INSTALLER
	J 8092 UNIVERSAL DRIVER HANDLE ($\frac{3}{4}$ " - 10 Thread)
	J 22227-A RIGHT HAND BEARING REMOVER
	J 22888-20 UNIVERSAL PULLER
	J 22888-30 PULLER LEGS (Use with J 22888-20)
	J 22912-01 INPUT SHAFT LEFT HAND BEARING REMOVER
	J 22919 DIFFERENTIAL SIDE BEARING CONE INSTALLER (Use with J 8092)

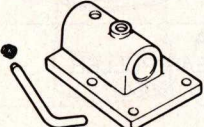
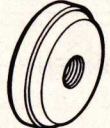


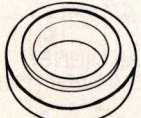
	J 23423-A TRANSAXLE CASE BEARING CUP INSTALLER (Use with J 8092)
	J 26936 RIGHT HAND INPUT SHAFT SEAL & BEARING CUP INSTALLER (Use with J 8092)
	J 26937 SHIFTER SHAFT SEAL INSTALLER
	J 26938 AXLE SHAFT SEAL & BEARING CUP INSTALLER (Use with J 8092)
	J 26941 TRANSMISSION CASE BEARING CUP REMOVER (Use with J 2619-01 or J 23907)
	J 26942 INPUT/OUTPUT SHAFT INNER RACE INSTALLER
	J 26943 INPUT/OUTPUT SHAFT BEARING REMOVER PILOT
	J 26946 INPUT SHAFT RIGHT HAND BEARING CONE REMOVER
	J 28406 RIGHT HAND INPUT SHAFT INNER BEARING INSTALLER


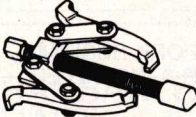
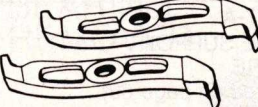
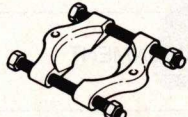
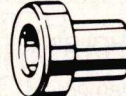
FX125 AND FX170 4-SPEED (CONTINUED)

	J 28408 TRANSMISSION HOLDING FIXTURE
	J 28410 GASKET REMOVER
	J 28411 SHIFTER SHAFT ALIGNMENT PIN
	J 28412 CLUTCH FORK BUSHING REMOVER & INSTALLER
	J 28467-A ENGINE SUPPORT FIXTURE
	J 28468 AXLE SHAFT REMOVER (Use with J 2619-01)

	J 29074 CLUTCH ALIGNMENT ARBOR
	J 29647-A REMOVAL ADAPTER
	J 33366 TRANSAXLE HOLDING FIXTURE (Use with J 3289-20)
	J 35953 ENGINE SUPPORT FIXTURE FOOT MODIFICATION L-CAR (Use with J 28467-A)
	J 33162 DRIVE JOINT BOOT PROTECTOR



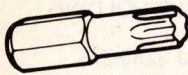
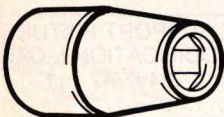
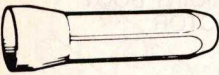


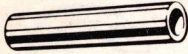

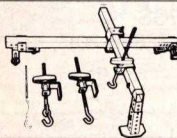


76MM 5-SPEED (ISUZU M200)

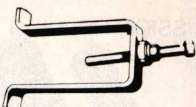
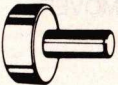
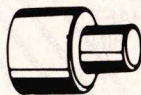




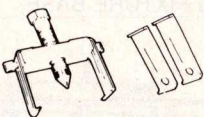
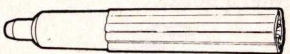
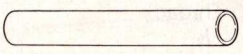
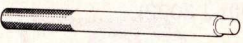
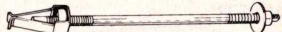
	J 3289-20 HOLDING FIXTURE BASE
	J 7817 OUTPUT RACE INSTALLER (Use with J 8092)
	J 8092 UNIVERSAL DRIVER HANDLE (3/4" - 10 Thread)
	J 8611-01 DIFFERENTIAL RACE INSTALLER (Use with J 8092)
	J 8853-01 OUTPUT SHAFT SECOND COLLAR BEARING INSTALLER

	J 22227-A RIGHTHAND BEARING REMOVER
	J 22888-20 UNIVERSAL PULLER
	J 22888-30 PULLER LEGS (Use with J 22888-20)
	J 22912-01 INPUT SHAFT LEFT HAND BEARING REMOVER
	J 22919 DIFFERENTIAL SIDE BEARING CONE INSTALLER (Use with J 8092)

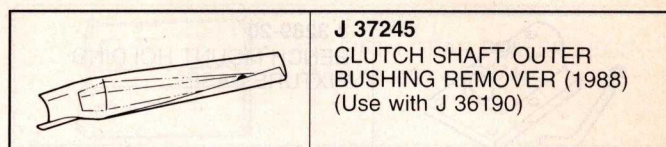
MANUAL TRANSAXLE

76MM 5-SPEED (ISUZU M200) (CONTINUED)

	J 23598 PILOT PLUG (Use with J 22888-20)
	J 24256-A REAR BEARING OUTER RACE REMOVER (Use with J 8092)
	J 25359-6 TORX BIT #45 (Use with J 25359-9)
	J 25359-9 TORX BIT HOLDER
	J 26540 INPUT SHAFT SEAL INSTALLER
	J 26938 AXLE SHAFT SEAL & BEARING CUP INSTALLER (Use with J 8092)
	J 26941 TRANSMISSION CASE BEARING CUP REMOVER (Use with J 2619-01 or J 23907)
	J 28406 CLUTCH SHAFT OIL SEAL INSTALLER
	J 28412 CLUTCH FORK BUSHING REMOVER & INSTALLER
	J 28467-A ENGINE SUPPORT FIXTURE (Featured on page 83)
	J 29074 CLUTCH ALIGNMENT ARBOR
	J 33366 TRANSAXLE HOLDING FIXTURE (Use with J 3289-20)

	J 33367 BEARING CUP PULLER BRIDGE
	J 33368 OUTPUT SHAFT FRONT BEARING INSTALLER
	J 33369 OUTPUT SHAFT FRONT BEARING REMOVER PILOT
	J 33370 OUTPUT SHAFT REAR BEARING CUP REMOVER & INSTALLER (Use with J 8092)
	J 33371 INPUT SHAFT FRONT BEARING CUP INSTALLER (Use with J 8092)
	J 33373 SHIM SELECTOR
	J 33374 BEARING & COLLAR INSTALLER
	J 35274-A FIFTH GEAR PULLER (Includes J 35950)
	J 35282 CLUTCH ALIGNMENT ARBOR (R-Car)
	J 36037 CLUTCH SHAFT OUTER BUSHING INSTALLER (1988)
	J 36190 DRIVER HANDLE
	J 37158-A CLUTCH SHAFT INNER BEARING REMOVER (1988)

76MM 5-SPEED (ISUZU M200) (CONTINUED)



GEO METRO/CHEVROLET SPRINT

J 34852 PRELOAD CHECKING TOOL

This tool is used to check the rotating torque of the transaxle assembly. Use the J 544-01 Tension Scale for accurate measurement.

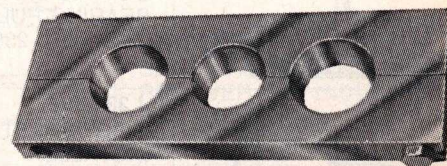


	J 7079-2 UNIVERSAL DRIVER HANDLE (Non Threaded)
	J 34842 BEARING INSTALLER (Use with J 7079-2)
	J 34844 TRANSAXLE SHAFT BEARING INSTALLER
	J 34846 COUNTERSHAFT BEARING INSTALLER
	J 34848 CLUTCH PILOT BEARING INSTALLER (Use with J 7079-2)
	J 34849 TRANSAXLE SHAFT BEARING OUTER RACE INSTALLER (Use with J 7079-2)
	J 34851 DIFFERENTIAL SIDE BEARING PULLER PLUG (Use with J 28509-A)

	J 34855 INPUT SHAFT SEAL INSTALLER
	J 34857 GEAR SHIFT SHAFT SEAL INSTALLER
	J 34858 BEARING PRELOAD SHIM GAUGE
	J 34861 CLUTCH RELEASE OUTER BUSHING REMOVER
	J 34862 CLUTCH RELEASE INNER BUSHING REMOVER
	J 37158-A CLUTCH SHAFT INNER BEARING REMOVER

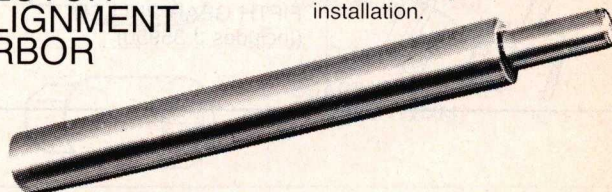
J 34843 TRANSAXLE SHAFT BEARING REMOVER

The three different size bearings on the input and output shafts can all be removed with this one press plate puller.



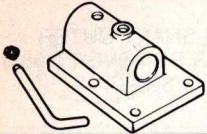


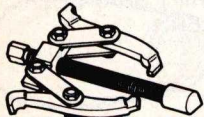


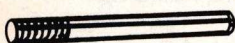

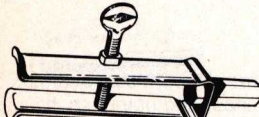
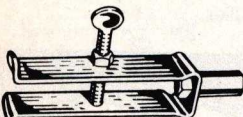

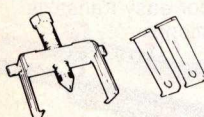
J 34860 CLUTCH ALIGNMENT ARBOR


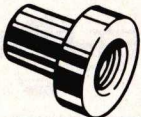
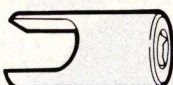
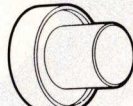
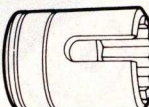

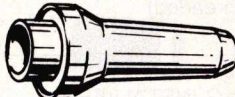
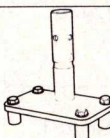

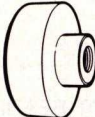
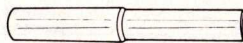
This tool will properly align the clutch for easy transaxle installation.



MANUAL TRANSAXLE

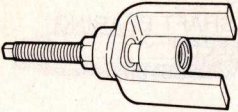
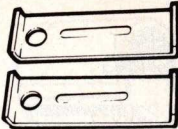
NOVA 5-SPEED

	J 3289-20 BENCH MOUNT HOLDING FIXTURE BASE
	J 8001 DIAL INDICATOR SET
	J 8092 DRIVER HANDLE 3/4" - 10 Thread
	J 22888-20 DIFFERENTIAL SIDE BEARING PULLER
	J 22912-01 INPUT & OUTPUT CLUSTER GEAR & BEARING REMOVER & INSTALLER
	J 23907 SLIDE HAMMER 1/2" - 13 Thread J 23907-5 Leg (Featured on page 156)
	J 25025-1 DIAL INDICATOR MOUNTING POST
	J 26941 DIFFERENTIAL SIDE BEARING SEAL PULLER (Use with J 23907)
	J 29369-1 INPUT SHAFT FRONT BEARING PULLER (Use with J 23907)
	J 29369-2 OUTPUT SHAFT FRONT BEARING PULLER (Use with J 23907)
	J 33183 INPUT SHAFT SEAL INSTALLER
	J 35274-A FIFTH GEAR PULLER (Includes J 35950)


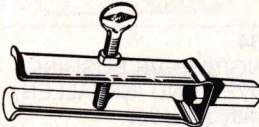
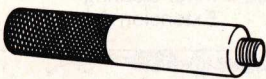
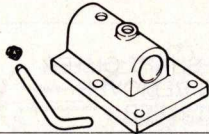
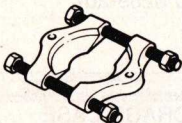
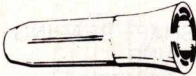

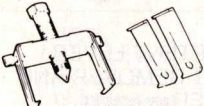
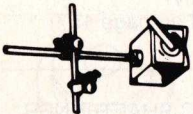
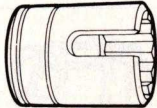
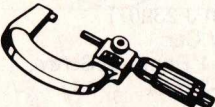
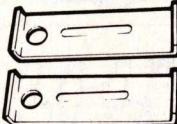
	J 35378 DIFFERENTIAL SIDE BEARING PULLER PILOT (Use with J 22888-20)
	J 35399 DIFFERENTIAL SIDE BEARING CUP REMOVER (Use with J 8092)
	J 35405 DIFFERENTIAL PRELOAD WRENCH
	J 35409 DIFFERENTIAL SIDE BEARING INSTALLER
	J 35451 REVERSE LIGHT SWITCH SOCKET
	J 35552 DIFFERENTIAL SIDE BEARING CUP INSTALLER (Use with J 8092)
	J 35553 DIFFERENTIAL SIDE BEARING SEAL INSTALLER
	J 35654 HOLDING FIXTURE (Use with J 3289-20)
	J 35656 INPUT SHAFT FRONT BEARING INSTALLER (Use with J 8092)
	J 35657 OUTPUT SHAFT FRONT BEARING INSTALLER (Use with J 8092)
	J 35757 CLUTCH ALIGNMENT ARBOR

MANUAL TRANSAXLE

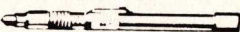
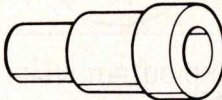

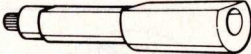
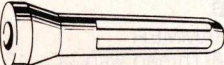
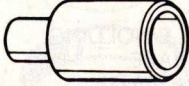
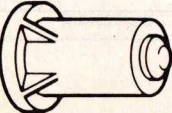
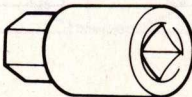
NOVA 5-SPEED (CONTINUED)

	J 35799-A FIFTH GEAR INSTALLER		J 35950 FIFTH GEAR PULLER LEGS (Use with J 35274)
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GEO PRIZM 5-SPEED MANUAL TRANSAXLE


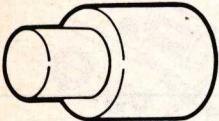
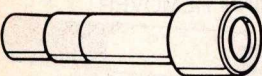
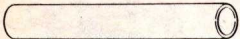
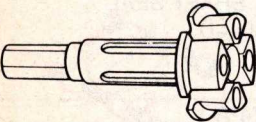
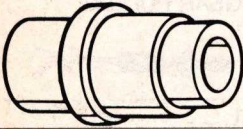

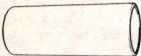
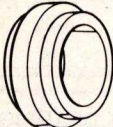

	J 8001 DIAL INDICATOR		J 29369-1 INPUT SHAFT FRONT BEARING REMOVER
	J 8092 UNIVERSAL DRIVER HANDLE		J 3289-20 BENCH MOUNT HOLDING FIXTURE BASE
	J 22912-01 SPLIT PLATE BEARING REMOVER		J 33183 INPUT SHAFT SEAL INSTALLER
	J 23907 SLIDE HAMMER		J 35274-A FIFTH GEAR PULLER
	J 26900-13 MAGNETIC BASE		J 35451 REVERSE LIGHT SWITCH SOCKET
	J 26900-2 MICROMETER		J 35950 HOLDING FIXTURE

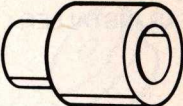
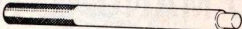
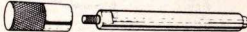
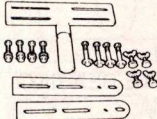
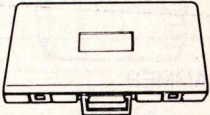

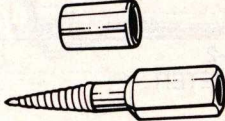
HM 282 (5TM40) 5-SPEED

	J 24731-250 250°F TEMPIL STICK TEMPERATURE INDICATION CRAYON		J 36027 SHIFT-SHAFT BEARING REMOVER (Use with J 36190)
	J 35822 CLUTCH ALIGNMENT ARBOR		J 36029 SHIFT RAIL BUSHING REMOVER AND INSTALLER (Use with J 36190)
	J 35823 SHIFT SHAFT SEAL INSTALLER		J 36030 REVERSE SHIFT RAIL BUSHING INSTALLER (Use with J 36190)
	J 35824 INPUT BEARING & SEAL ASSEMBLY REMOVER/ INSTALLER		J 36031 BEARING RETAINER HEX BIT (12MM)

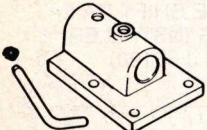
MANUAL TRANSAXLE

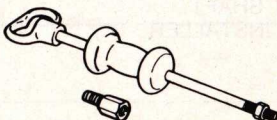
HM 282 (5TM40) 5-SPEED (CONTINUED)

	J 36032 CLUTCH SHAFT INNER BUSHING REMOVER (Use with J 23907)
	J 36033 CLUTCH SHAFT INNER BUSHING INSTALLER (Use with J 36190)
	J 36034 SLIDING SLEEVE BUSHING REMOVER AND INSTALLER (Use with J 36190)
	J 36037 CLUTCH SHAFT OUTER BUSHING REMOVER AND INSTALLER
	J 36038 OUTPUT SHAFT BEARING CUP REMOVER (Use with J 23907)
	J 36039 SHIFT DETENT LEVER BUSHING REMOVER AND INSTALLER (Use with J 36190)
	J 36182 ASSEMBLY PALLET
	J 36183 PRESS TUBE
	J 36184 PRESS TUBE REDUCER (Use with J 36183)
	J 36185 INPUT AND OUTPUT SHAFT REMOVER (Use with J 36182)

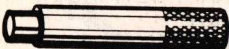



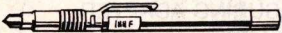
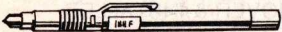
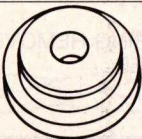
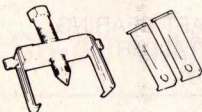

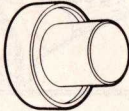
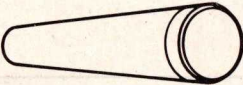
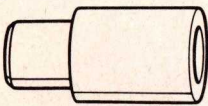
	J 36189 SHIFT SHAFT BEARING INSTALLER (Use with J 36190)
	J 36190 DRIVER HANDLE
	J 36720 CLUTCH SHAFT BEARING INSTALLER N and W car J 36720-1 Outer Bearing Installer J 36720-2 Inner Bearing Extension Arbor
	J 36842 HOLDING FIXTURE (Use with J 3289-20)
	J 36844 TOOL STORAGE CASE
	J 36850 TRANSMISSION ASSEMBLY LUBRICANT (Featured on page 157)
	J 37107 CLUTCH SHAFT INNER BEARING REMOVER (Use with J 23907) N and W Car J 37107-1 Removal Screw J 37107-2 Pilot


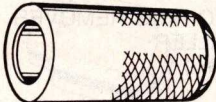
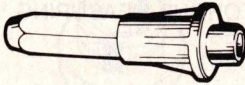
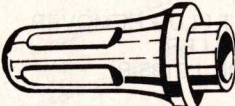

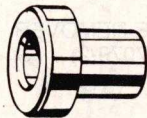


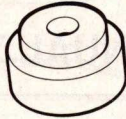


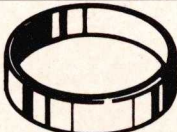
PONTIAC LEMANS F-13 & F-16 5-SPEED

	J 3289-20 TRANSAXLE HOLDING FIXTURE BASE (Use with J 36842)
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	J 6125-B SLIDE HAMMER ($\frac{5}{16}$ " - 18 Thread with $\frac{3}{8}$ " - 16 Adapter)
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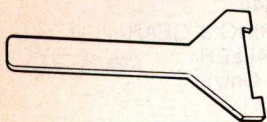
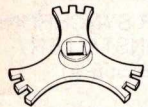
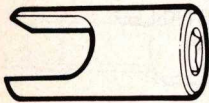
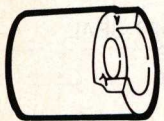
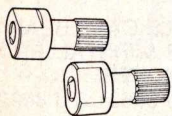
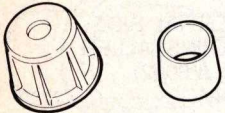
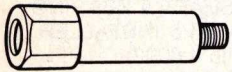
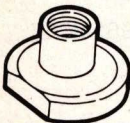
PONTIAC LEMANS F-13 & F-16 5-SPEED (CONTINUED)

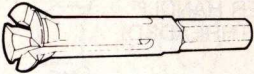
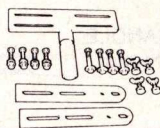
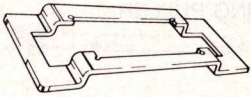
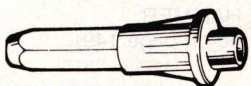
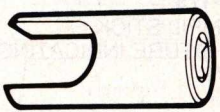

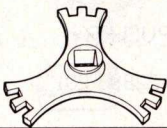
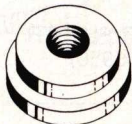
	J 7079-2 DRIVER HANDLE (NON THREADED)
	J 8092 DRIVER HANDLE ($\frac{3}{4}$ " - 10 Thread)
	J 22888-20 BEARING PULLER
	J 23907 SLIDE HAMMER (Featured on page 149)
	J 24731-175 175° TEMPIL STICK TEMPERATURE INDICATING CRAYON
	J 24731-213 213° TEMPIL STICK TEMPERATURE INDICATING CRAYON
	J 34851 BEARING PULLER ADAPTER (Use with J 22888-20) (F-13 Only)
	J 35274-A FIFTH GEAR PULLER (Includes J 35950)
	J 35378 DIFFERENTIAL SIDE BEARING PULLER PILOT (F-16 Only)
	J 35409 DIFFERENTIAL SIDE BEARING INSTALLER (F-16 Only)
	J 36535 GEAR INSTALLER
	J 36536 CLUTCH RELEASE LEVER BUSHING REMOVER & INSTALLER (Use with J 36190)

	J 36544 BEARING & GEAR INSTALLER (F-13 Only)
	J 36545 FIFTH GEAR SYNCHRONIZER & SPACER INSTALLER (Use with J 36556-A)
	J 36546 SEAL INSTALLER (F-13 Only)
	J 36547 DRIVESHAFT SEAL INSTALLER (F-13 Only)
	J 36548 TRANSAXLE CASE BEARING REMOVER & INSTALLER & SEAL REMOVER (Use with J 36631 & J 8092)
	J 36549 DIFFERENTIAL SIDE BEARING INSTALLER (Use with J 8092) (F-13 Only)
	J 36550 DRIVESHAFT & BEARING REMOVER & INSTALLER (Use with J 8092) (F-13 Only)
	J 36554 CLUTCH ASSEMBLY RETAINER
	J 36555 FIFTH GEAR REMOVER ADAPTER (Use with J 35274-A and J 36852-2)
	J 36556-A TRANSAXLE ASSEMBLY PALLET
	J 36556-4 5TH GEAR & SYNCHRONIZER ASSEMBLY ADAPTER (F-16 Only)
	J 36631 OUTER RACE RECEIVER (Use with J 36548)

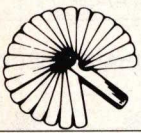

MANUAL TRANSAXLE


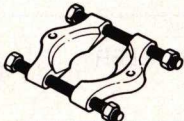
PONTIAC LEMANS F-13 & F-16 5-SPEED (CONTINUED)

	J 36633 SNAP RING RETAINER
	J 36635 BEARING RING REMOVER & INSTALLER (F-13 Only)
	J 36636 SPIN TORQUE MEASURING ADAPTER (F-13 Only)
	J 36637 DETENT PLUG REMOVER & INSTALLER (Use with J 6125-B)
	J 36638 DIFFERENTIAL CLAMPS
	J 36639 DRIVE AXLE REMOVER (Use with J 7079-2)
	J 36644 DRIVESHAFT & END SHIELD PLUG REMOVER (Use with J 6125-B)
	J 36664 MAINSHAFT BEARING INSTALLER (Use with J 8092) (F-13 Only)

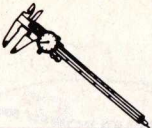

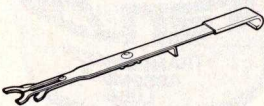
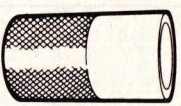
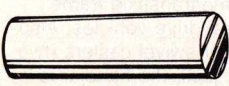

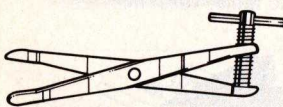
	J 36669 MAINSHAFT BEARING REMOVER (Use with J 23907) (F-13 only)
	J 36842 HOLDING FIXTURE (Use with J 3289-20)
	J 36852-2 FIFTH GEAR PULLER SUPPORT BRACKET (F-16 Only)
	J 376601 DRIVESHAFT SEAL INSTALLER (F-16 Only)
	J 37602 SPIN TORQUE MEASURING ADAPTER (F-16 Only)
	J 37603 DRIVESHAFT BEARING REMOVER & INSTALLER (F-16 Only)
	J 37604 BEARING RING REMOVER & INSTALLER (F-16 Only)
	J 37607 MAINSHAFT BEARING CUP INSTALLER (F-16 Only)

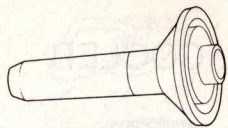
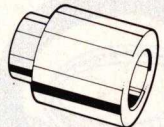
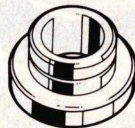
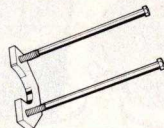
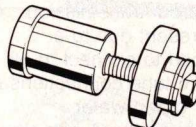

TRACKER 5-SPEED MANUAL TRANSMISSION

	J 3172 FEELER GAGE
	J 8092 DRIVER HANDLE

	J 22888-20 UNIVERSAL PULLER
	J 22912-01 SPLIT PLATE

TRACKER 5-SPEED MANUAL TRANSMISSION (CONTINUED)

	J 26900-7 DIAL CALIPER
	J 28406 BEARING INSTALLER
	J 34757 CIRCLIP REMOVER
	J 35425 HIGH SPEED HUB INSTALLER
	J 35664 BEARING INSTALLER
	J 35871 COUNTERSHAFT FRONT BEARING INSTALLER
	J 37637 CASE SEPARATOR

	J 37750 OIL SEAL INSTALLER
	J 37753 BEARING INSTALLER
	J 37754 COUNTER SHAFT BEARING INSTALLER
	J 37756 OUTPUT SHAFT BEARING PULLER ADAPTER
	J 37757 OUTPUT SHAFT FRONT BEARING REMOVER
	J 37758 COUNTERSHAFT REAR PLUG INSTALLER

ZF S6-40 MANUAL TRANSMISSION CORVETTE

	J 21359-A EXTENSION HOUSING SEAL INSTALLER
	J 29381 SEAL INSTALLER

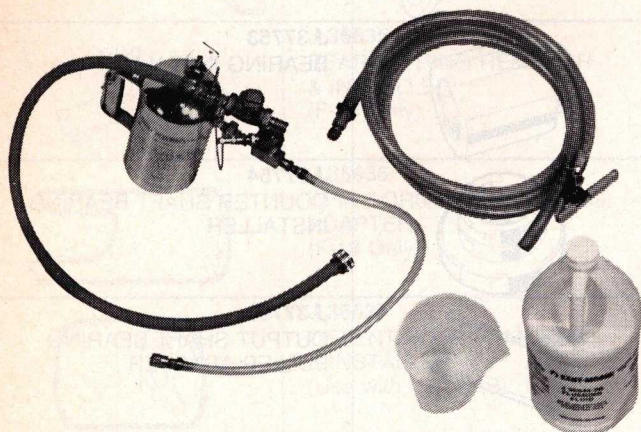
	J 38126 SEAL INSTALLER
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AUTOMATIC TRANSAXLE

GENERAL SERVICE TOOLS

J 35944

"TRANSMISSION" OIL COOLER & LINE FLUSHER



J 35944 is used to remove contaminants from transmission coolers and cooler pipes which may be present due to a transmission failure. The flusher is equipped to connect to all GM vehicles which have 5/16 inverted flare tube connections on the cooler pipes. J 35944 utilizes the flow of tap water combined with Kent-Moore flushing fluid (see below) with shop air to lift and force metal chips or clutch material out of the cooler and lines which would otherwise be introduced into the replaced or repaired transmission.

UNIQUE FEATURES:

- Regular shop air, as high as 120 PSI, used intermittently throughout procedure creates a dramatic surge of water/cleaner through the system to dislodge foreign materials.
- The actual flushing procedure takes approximately 10 minutes during which time the connections are reversed to perform a back flush.
- Unlike other liquids used for this purpose, flushing fluid is biodegradable and can be discharged or emptied directly into any drainage system without danger to the environment.

OTHER FEATURES:

- Chrome-plated brass tank
- Check valve to protect water supply
- Discharge hose assembly
- On-Off valve for water flow
- One gallon of J 35944-20 Flushing Fluid (enough for six flushing operations)
- Measuring cup
- Complete operating instructions

COOLER FLUSHING FLUID

Flushing fluid is a concentrated blend of detergents which cut transmission fluid to lift contaminants, along with silicates to aid in rinsing and protecting soft metals, such as brass and aluminum. Each flushing operation requires 21 ounces of fluid. Flushing Fluid is supplied in one-gallon plastic bottles.

J 35944-20
1 Gallon

J 35944-CSE
6 Gallons



J 36400-2
TORQUE CONVERTER
CLUTCH CIRCUIT TESTER
(Featured on page 149)

J 36850

TRANSMISSION ASSEMBLY LUBRICANT

Transjel™ is the assembly lubricant specially formulated for the automatic and manual transmission work you do. It lubricates and helps hold in place needle bearings, thrust washers, sealing rings, "O" rings, hydraulic seals and gaskets. And it's completely soluble in transmission fluids, so it won't clog filters.



J 36295

ENGINE/TRANSAXLE FRAME HANDLER

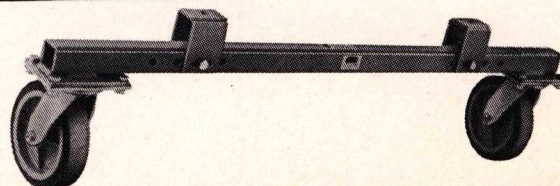
Eases removal and replacement of engine/transaxle frame assemblies of General Motors front wheel drive vehicles. Also services Pontiac Fiero. Equipped with four swivel casters (two of which can be locked) and a hydraulic jack, the handler is wheeled under the chassis of a car on a hoist. Two furnished wooden blocks on its mounting plate are positioned beneath the assembly under the axle and tightened in place. The plate is then jacked up and tilted by means of the adjustable screws to insure a proper fit. Finally, the chassis is raised, the restraining strap tightened, and the unit rolled away to a service area. Handler has a 2,000 lb. capacity; table tilts 22° front to back and 17½° side to side. Height, floor to table: 19¼" min., 22¾" max.



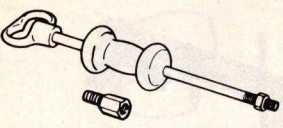
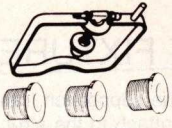
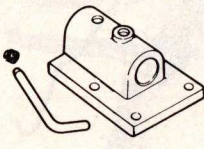
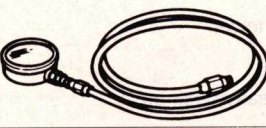

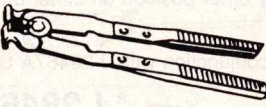

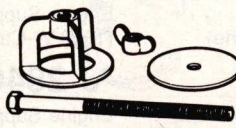
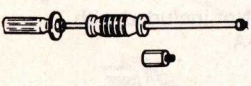
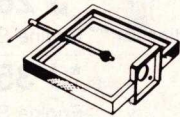
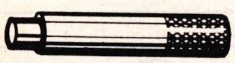
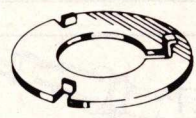
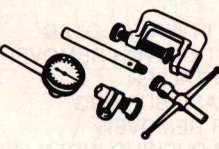
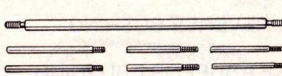
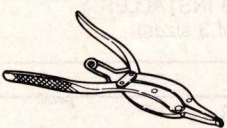

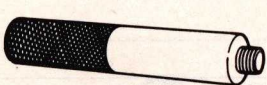
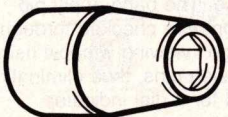
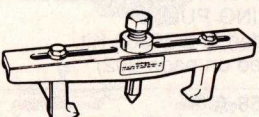


J 36855

FRONT WHEEL DRIVE CAR DOLLY

For use on all GM series front wheel drive vehicles. This lightweight, sturdy car dolly is a must tool for any shop doing engine/transaxle or collision repair work on GM series front wheel drive vehicles. Readily attaches to vehicle's cradle mounting holes.



125 & 125C (3T40) TURBO HYDRA-MATIC

	J 2619-01 SLIDE HAMMER (5/8"-18 with 1/2"-13 adapter) (Use with J 28468 & J 28537-A) J 2619-5 Handle & Weight SE 1879-2 Adapter		J 21369-E CONVERTER LEAK TEST FIXTURE J 21369-40 125c Plug J 26615-3 1.625" Plug J 26615-6 1.375" Plug
	J 3289-20 TRANSAXLE HOLDING FIXTURE BASE (Use with J 28664-B) J3289-22 Pin J3289-SSS Set Screw		J 21867 UNIVERSAL PRESSURE GAUGE SET (9 ft. hose; 0-300 P.S.I.) J 4872-2 Gauge
	J 5207 SNAP RING PLIERS (Pump shaft bearing retainer) (Internal .090" dia. straight tip)		J 22610 DRIVE AXLE SEAL CLAMP PLIERS (Eared clamp with rubber seal)
	J 5403 SNAP RING PLIERS For low band drive valve (Internal .038" dia. straight tip)		J 23327 FORWARD CLUTCH SPRING COMPRESSOR J 21420-2 Disc J 23327-1 Bridge J 23327-2 Bolt & Nut
	J 6125-1B SLIDE HAMMER (3/8"-16 thread with 5/16"-18 adapters) (Use with J 26941) J 6125-11 Adapter		J 23456 CLUTCH SPRING COMPRESSOR PRESS J 23456-3 Center screw J 23456-4 Handle J 23456-14 Bridge
	J 7079-2 DRIVER HANDLE (Non threaded) (Use with J 28698)		J 25018-A FORWARD SPRING COMPRESSOR ADAPTER
	J 8001 DIAL INDICATOR SET J 8001-1 Clamp J 8001-2 Sleeve J 8001-3 Dial indicator J 8001-4 Hole attachment		J 25025-B PUMP & VALVE PIN & DIAL INDICATOR STAND SET (Includes J 25025-7A) J 25025-1 M8 x 1.25 Pin J 25025-5 M6 x 1.00 Pin J 25025-6 5/16"-18 Pin J 25025-7A Post
	J 8059 EXTERNAL SNAP RING PLIERS - Parallel jaws		J 25359-5 #40 TORX DRIVE BIT (Drive sprocket support remover & installer)
	J 8092 DRIVER HANDLE (3/4" - 10 thread)		J 25359-9 3/8" DRIVE BIT HOLDER (For J 25359-5)
	J 8433 GOVERNOR DRIVE GEAR REMOVER J 8433-2 Leg J 8433-3 Center screw		J 26744-A CLUTCH PISTON SEAL INSTALLER (.015" and .031" wire ends) (Featured on page 201)
	J 21366 CONVERTER HOLDING STRAP		

AUTOMATIC TRANSAXLE

125 & 125C (3T40) TURBO HYDRA-MATIC (CONTINUED)

J 28467-A UNIVERSAL SUPPORT FIXTURE

Used for service procedures requiring engine support on transverse mounted engines. On GM vehicles the support legs attach to the strut tower.

Features Include:

- Universal design
- Support legs attach to any GM strut tower
- Illustrated instruction booklet
- Heavy duty design
- Large wing nuts on lifting hooks for easy hook-up
- Front leg height is adjustable
- Lifting hook brackets can slide to any other position on either bar.

Accessories

The following accessories are used in conjunction with J 28467A Support Fixture.

*J 28467-45

Engine Lifting Hooks (Not Shown)
(Required on A-car with 4.3L diesel engine)

J 28467-50

Specially designed hook needed to support the 3.8 liter engine. (Included with J 28467-A)

*J 28467-60

This special support foot is needed for Pontiac Fiero GT Fastback 1986 to 1988

*J 28467-89

Engine Support Fixture Adapters (Geo Metro)

*J 28467-90

Engine Support Fixture Adapters
(1990 W-Car; use with J 36462 and J 35953)

*J 28467-125

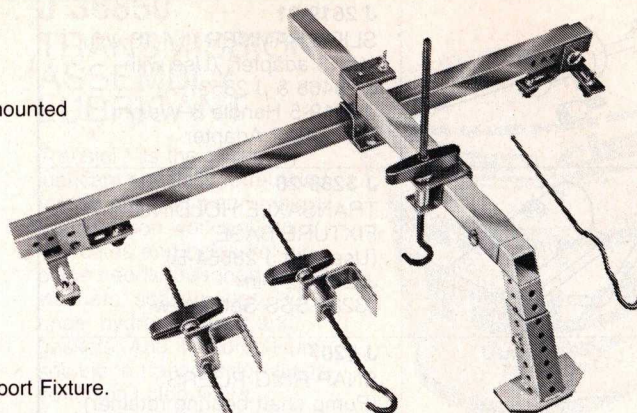
Engine Support Adapters
(Geo Storm)

*J 28467-200

Engine Support Fixture Adapter (U-Van)

*J 35563

Engine Support Bracket (Not Shown)
(Required on 2.8L Fiero application)



*J 35953

Engine support foot modification for L-car & W-car.

J 36462

Engine support adapter leg set
(W-car only)

***NOTE: Not included with J 28467-A.**

J 28537-B BUSHING SERVICE SET

Consists of:

- J 28537-1 CONVERTER AND LO & REVERSE BUSHING INSTALLER
- J 28537-2 CASE & DRIVE SPROCKET SUPPORT BUSHING INSTALLER, INPUT INTERNAL GEAR REMOVER
- J 28537-3 DRIVEN SPROCKET SUPPORT & REACTION SUN GEAR BUSHING INSTALLER

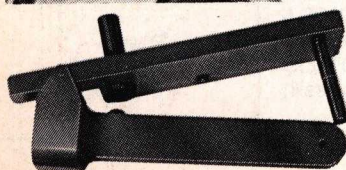
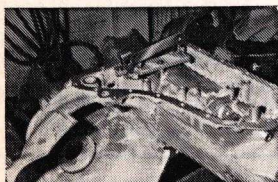
- J 28537-4 REACTION CARRIER & INPUT INTERNAL GEAR BUSHING INSTALLER - DIRECT CLUTCH REMOVER
- J 28537-5 DIRECT CLUTCH BUSHING INSTALLER
- J 28537-6 INPUT SHAFT INSTALLER & CASE BUSHING REMOVER FINAL DRIVE GEAR REMOVER
- J 28537-7 FINAL DRIVE INTERNAL GEAR BUSHING INSTALLER
- J 28537-17 DRIVE SPROCKET BUSHING INSTALLER
- J 29369 BUSHING REMOVERS (Set of 3 sizes)

J 28535 INTERMEDIATE BAND APPLY PIN GAUGE

(Includes J 28535-50, checking block)

On the 125 and 125c THM this tool is necessary to gauge the intermediate band to apply pin dimension to determine the correct pin to use. The band apply pin dimensions are checked through a "go; no go" viewing window using transmission pins, thus eliminating the need for a dial indicator.


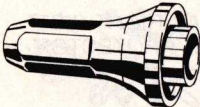
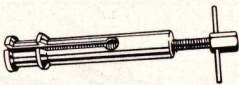
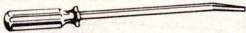
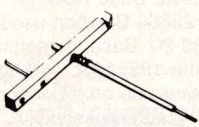

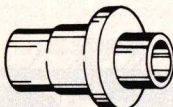



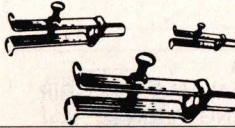
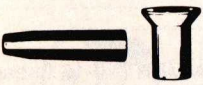
SERVICE PARTS:
J 28535-20 Rod & Checking Block

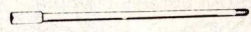
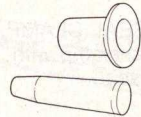
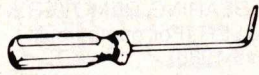

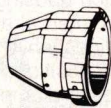
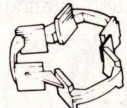
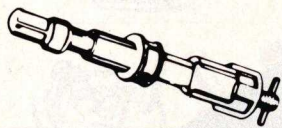
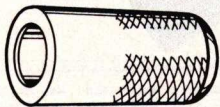
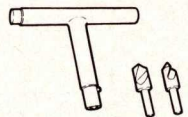
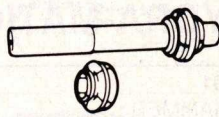
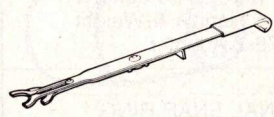
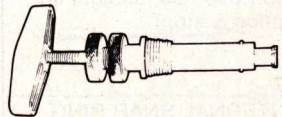


	J 26938 AXLE SEAL INSTALLER
	J 26941 DRIVE SPROCKET NEEDLE BEARING PULLER (Included in J 29369 Kit, featured on page 202)
	J 26958-A OUTPUT SHAFT ALIGNING AND LOADING TOOL J 26958-10 Adapter Plug J 26958-11 Adapter Bracket J 26958-16 Tool Fixture

AUTOMATIC TRANSAXLE

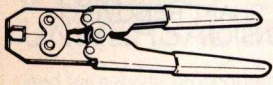
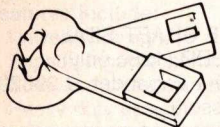
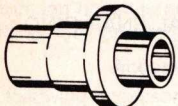
125 & 125C (3T40) TURBO HYDRA-MATIC (CONTINUED)

	J 28468 AXLE SHAFT REMOVER (Constant velocity drive joint) (Use with J 2619-01 Slide Hammer)
	J 28540-A CONVERTER SEAL INSTALLER
	J 28544 INPUT SHAFT LIFTER
	J 28585 SNAP RING REMOVER
	J 28588 REACTION SUN GEAR SNAP RING & CARRIER WASHER GAUGE
	J 28677 SPROCKET SUPPORT NEEDLE BEARING INSTALLER
	J 28698 PUMP BEARING REMOVER AND INSTALLER (Use with J 7079-2)
	J 28712 DRIVE AXLE BOOT PROTECTOR (Two included) Constant velocity drive joint
	J 29023 THERMO ELEMENT HEIGHT GAUGE
	J 29130 RIGHT HAND AXLE SHAFT SEAL INSTALLER
	J 29369 UNIVERSAL BUSHING & BEARING REMOVERS (Includes J 26941) (Featured on page 202)
	J 29569 TURBINE SHAFT SEAL INSTALLER (J 29569-1 Expander, J 29569-2 Compressor)

	J 29794 AXLE SHAFT REMOVER EXTENSION
	J 29829 TURBINE SHAFT SEAL INSTALLER (125c only) (J 29829-1 Expander, J 29829-2 Compressor)
	J 29836 UNIVERSAL SNAP RING REMOVER
	J 33008 AXLE SHAFT REMOVER (Use with J 2619-01 Slide Hammer) Tripot Drive Joint 1981-current
	J 33162 DRIVE AXLE BOOT PROTECTOR (Tripot drive joint, 1981-current)
	J 33165 DRIVE JOINT RETAINER (Tripot drive joint, 1981-current)
	J 33381 FINAL DRIVE REMOVER AND INSTALLER
	J 33411 AXLE SLEEVE INSTALLER (1980 to 1982 X-Car)
	J 33856 THIRD ACCUMULATOR SEAT REFACING TOOL
	J 34008 LOW AND REVERSE CLUTCH HOUSING REMOVER & INSTALLER (Metal)
	J 34757 OUTPUT SHAFT "C" RING REMOVER AND INSTALLER (Supersedes J 28583)
	J 35138 UNIVERSAL CONVERTER END PLAY MEASUREMENT TOOL (All Turbo Hydra-matic transmissions)

AUTOMATIC TRANSAXLE

125 & 125C (3T40) TURBO HYDRA-MATIC (CONTINUED)

	J 35566 DRIVE AXLE SEAL CLAMP PLIERS (All earless clamps)
	J 35910 DRIVE AXLE SEAL CLAMP PLIERS (Earred clamp with thermo plastic seal)
	J 35914 PUMP BEARING REMOVER & INSTALLER (For pumps built after mid 1986)

J 28542-A LO-REVERSE CLUTCH UNIT REMOVER & INSTALLER



On the 125, 125c, 200, 200 4R, and 325 THM's, the reverse clutch housing must be aligned with internal and external splines while being lowered into position. This tool grips the inside diameter of the clutch and provides a means for holding and rotating the clutch housing.

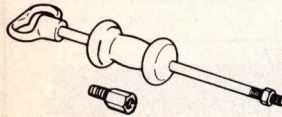


	J 36850 TRANSJEL™ ASSEMBLY LUBRICANT (Featured on page 178)
	J 37292-B TEAR AWAY RIGHT SIDE AXLE SEAL PROTECTOR (Pkg. of 2)



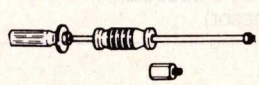
J 28664-B & J 3289-20 HOLDING FIXTURE & BASE



The Transaxle Case Holding Fixture, J 28664-B, when used with J 3289-20, Base, is required to mount the 125, 125c and 440 T4 THM transaxle on a bench for disassembly and reassembly. This fixture is designed with the mounting pin on the transaxle center of gravity so that the transaxle can be rotated to any position with a minimum of effort.




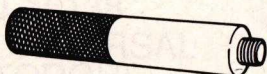
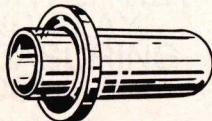

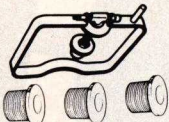
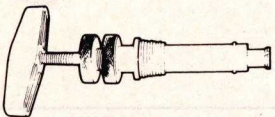

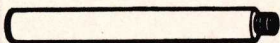


325/325 4L TURBO HYDRA-MATIC

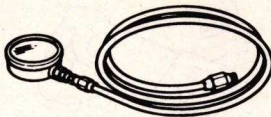
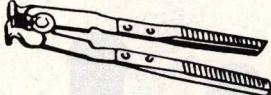
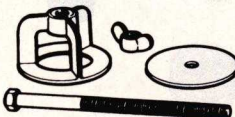
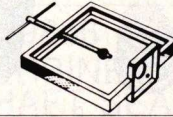



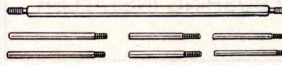
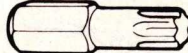
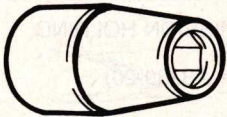

	J 2619-01 SLIDE HAMMER ($\frac{5}{8}$ "-18 with $\frac{1}{2}$ "-13 adapter) J 2619-5 Handle & Weight SE 1879-2 Adapter
	J 4646 INTERNAL SNAP RING PLIERS (.090" dia. straight tip with spring & stop)
	J 5207 #25 INTERNAL SNAP RING PLIERS (.090" dia. straight tip)

	J 5403 INTERNAL SNAP RING PLIERS (.038" dia. straight tip)
	J 5586-A EXTERNAL VACUUM GRIP SNAP RING PLIERS
	J 6125-1B SLIDE HAMMER ($\frac{3}{8}$ "-16 thread with J 6125-11 $\frac{5}{16}$ "-18 Adapter)

AUTOMATIC TRANSAXLE

325/325 4L TURBO HYDRA-MATIC (CONTINUED)

	J 6133-01 DRIVE SPROCKET BEARING INSTALLER
	J 8001 DIAL INDICATOR SET J 8001-1 Clamp J 8001-2 Sleeve J 8001-3 Dial Indicator J 8001-4 Hole Attachment
	J 8059 EXTERNAL SNAP RING PLIERS - Parallel jaws
	J 8092 DRIVER HANDLE (3/4"-10 thread)
	J 21359-A PUMP SEAL INSTALLER
	J 21366 CONVERTER HOLDING STRAP
	J 21369-E CONVERTER LEAK TEST FIXTURE J 21369-40 125c Plug J 26615-3 1.625" Plug J 26615-6 1.375" Plug
	J 35138 CONVERTER END PLAY MEASURING TOOL
	J 21465-3 DRIVE SPROCKET SUPPORT BUSHING INSTALLER (325)
	J 21465-13 DRIVE HANDLE EXTENSION (3/4"-10 thread) Use with J 8092
	J 21465-15 DRIVE SPROCKET SUPPORT BUSHING REMOVER (325)
	J 21465-17 PUMP BUSHING REMOVER AND INSTALLER (325)

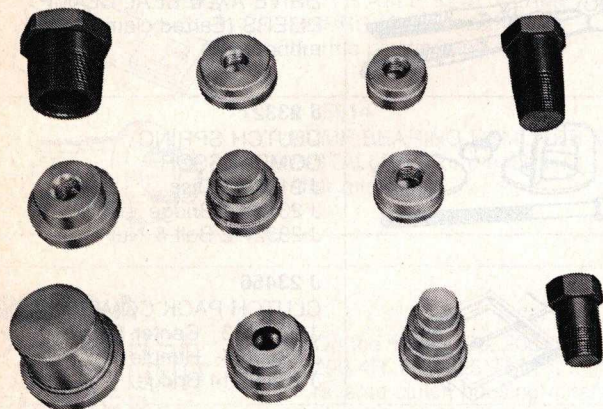
	J 21867 UNIVERSAL PRESSURE GAUGE SET (9 ft. hose; 0-300 P.S.I.) J 4872-2 Gauge
	J 22610 DRIVE AXLE SEAL CLAMP PLIERS (Eared clamp with rubber seal)
	J 23327 CLUTCH SPRING COMPRESSOR J 21420-2 Disc J 23327-1 Bridge J 23327-2 Bolt & Nut
	J 23456 CLUTCH PACK COMPRESSOR J 23456-3 Center Screw J 23456-4 Handle J 23456-14 Bridge
	J 25010 DIRECT CLUTCH SEAL PROTECTOR
	J 25011 LO/REVERSE CLUTCH SEAL PROTECTOR
	J 25014 INTERMEDIATE BAND APPLY PIN GAUGE J 25014-1 Pin J 25014-3 Body
	J 25025-B PUMP & VALVE BODY ALIGNMENT PINS & DIAL INDICATOR POST SET J 25025-1 M8 x 1.25 Pin J 25025-5 M6 x 1.00 Pin J 25025-6 5/16"-18 Pin J 25025-7A Post
	J 25359-5 #40 TORX DRIVE BIT (Oil pump)
	J 25359-9 TORX 3/8" DRIVE BIT HOLDER for J 29359-5
	J 26744-A CLUTCH PISTON SEAL INSTALLER (.015" and .031" wire ends) (Featured on page 201)

AUTOMATIC TRANSAXLE

325/325 4L TURBO HYDRA-MATIC (CONTINUED)

J 25019-A

325, 325 4L, 200,
200 4R
BUSHING
SERVICE SET



(Use with J 8092 & J 6125-1B)

Consists of:

- J 24036** REACTION SHAFT BUSHING REMOVER
- J 25019-2** FRONT STATOR PUMP & REAR SUN GEAR BUSHING INSTALLER
- J 25019-3** FRONT INTERNAL GEAR BUSHING REMOVER
- J 25019-4** DIRECT CLUTCH BUSHING REMOVER
- J 25019-6** REAR STATOR PUMP & DIRECT CLUTCH BUSHING INSTALLER (Small)
- J 25019-7** REAR CARRIER BUSHING INSTALLER
- J 25019-8** LO & REV. CLUTCH BUSHING INSTALLER
- J 25019-9** DIRECT CLUTCH & FRONT INTERNAL GEAR BUSHING INSTALLER
- J 25019-12** FRONT PUMP BUSHING INSTALLER
- J 25019-14** STATOR PUMP BUSHING REMOVER
- J 25019-16** DIRECT CLUTCH FRONT, REV. CLUTCH & REAR CARRIER BSH. REM.
- J 25019-17** SPECIAL CONTAINER ASSEMBLY
- J 25019-20** 200 4R FRONT PUMP BUSHING INSTALLER (1987 to current)

J 29369

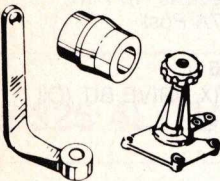
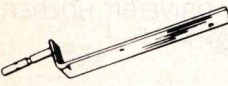
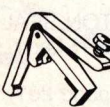
UNIVERSAL
BUSHING
REMOVERS



These expandable removers are invaluable for servicing automatic transmissions and other automotive components. The set includes 3 different sized removers which cover a bushing range from 1 to 4 inches. The Removers are used with J 2619-01 slide hammer.

SERVICE PARTS:


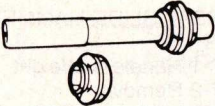
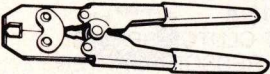
- J 29369-1 1"-2"
- J 29369-2 2"-3"
- J 26941 3"-4"

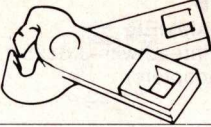

	J 26958-A OUTPUT SHAFT ALIGNMENT AND LOADING TOOL SET
	J 28492 TRANSMISSION HOLDING FIXTURE (Use with J 3289-20)
	J 28493 SERVO COVER DEPRESSOR

	J 28542-A LOW AND REVERSE CLUTCH HOUSING REMOVER AND INSTALLER (Plastic) (Featured on page 182)
	J 28585 SNAP RING REMOVER
	J 28667-A DIAL INDICATOR EXTENSION
	J 28712 DRIVE AXLE SEAL PROTECTORS (two included) Constant velocity drive joint

AUTOMATIC TRANSAXLE

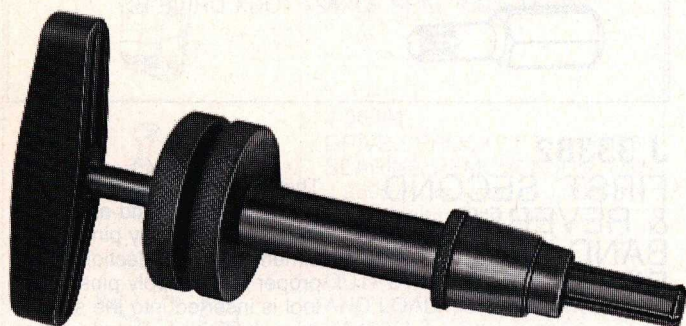
325/325 4L TURBO HYDRA-MATIC (CONTINUED)

	J 29836 UNIVERSAL SNAP RING REMOVER
	J 34008 LOW AND REVERSE CLUTCH HOUSING REMOVER AND INSTALLER (Metal)
	J 35566 DRIVE AXLE SEAL CLAMP PLIERS (All earless clamps)

	J 35910 DRIVE AXLE SEAL CLAMP PLIERS (Earred clamp with thermo plastic seal)
	J 36850 TRANSJEL TM ASSEMBLY LUBRICANT (Featured on page 178)

J 35138 UNIVERSAL TORQUE CONVERTER END PLAY MEASURING TOOL

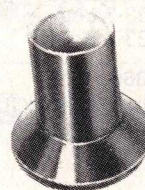
This tool was initially developed for the new 700 R4 and 440 T4 torque converters, however, the unique design features of the tool allow it to measure end play on all past and present General Motors torque converters with or without a converter clutch.



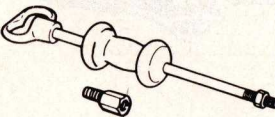
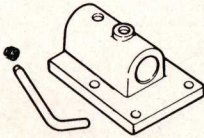

J 29846 TURBINE SHAFT SEAL INSTALLER


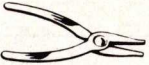

The solid teflon ring used on the turbine shaft of the 325 4L THM transmission must not be overstretched during installation. J 29846 allows the teflon ring to be slid in place and then sized into the seal groove.

SERVICE PARTS:
J 29846-1 Expander
J 29846-2 Compressor




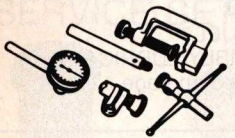

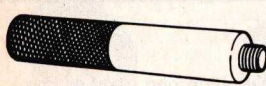
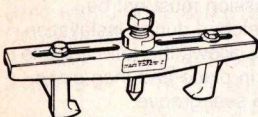
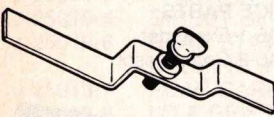
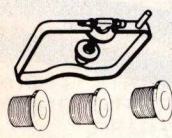
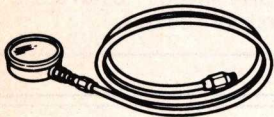
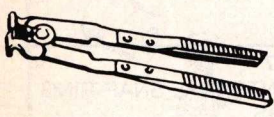
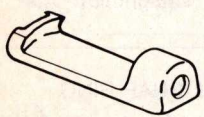
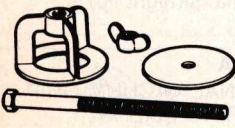
440 T4 (4T60)/F7 TURBO HYDRA-MATIC

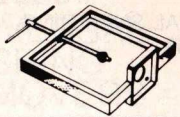

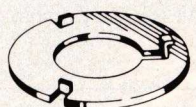
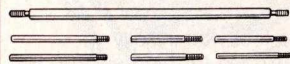
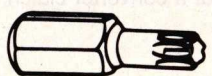
	J 2619-01 SLIDE HAMMER ($\frac{5}{8}$ " \times 18 with $\frac{1}{2}$ " \times 13 adapter) J 2619-5 Handle & Weight SE 1879-2 Adapter
	J 3289-20 TRANSMISSION HOLDING FIXTURE BASE (Use with J 28664-B) J 3289-22 Pin J 3289-SSS Set Screw
	J 4646 INTERNAL SNAP RING PLIERS (.090" dia. straight tip with spring & stop)

	J 5207 #25 INTERNAL SNAP RING PLIERS (.090" dia. straight tip)
	J 5403 INTERNAL SNAP RING PLIERS (.038" dia. straight tip)
	J 5586-A EXTERNAL VACUUM GRIP SNAP RING PLIERS

AUTOMATIC TRANSAXLE

440 T4 (4T60)/F7 TURBO HYDRA-MATIC (CONTINUED)

	J 6125-1B SLIDE HAMMER ($\frac{3}{8}$ " - 16 thread with J 6125-11 $\frac{5}{16}$ "-18 Adapters)
	J 8001 DIAL INDICATOR SET J 8001-1 Clamp J 8001-2 Sleeve J 8001-3 Dial Indicator J 8001-4 Hole Attachment
	J 8059 EXTERNAL SNAP RING PLIERS - Parallel jaws
	J 8092 DRIVER HANDLE ($\frac{3}{4}$ "-10 thread)
	J 8433 GOVERNOR DRIVE GEAR PULLER J 8433-2 Leg J 8433-3 Screw
	J 21366 CONVERTER HOLDING STRAP
	J 21369-E CONVERTER LEAK TEST FIXTURE J 21369-40 125c Plug J 26615-3 1.625" Plug J 26615-6 1.375" Plug
	J 21867 UNIVERSAL PRESSURE GAUGE SET (9 ft. hose; 0-300 P.S.I.) J 4872-2 Gauge
	J 22610 DRIVE AXLE SEAL CLAMP PLIERS (Eared clamp with rubber seal)
	J 23129 CONVERTER HOUSING SEAL REMOVER (Use with J 6125-1B)
	J 23327 CLUTCH SPRING COMPRESSOR J 21420-2 Disc J 23327-1 Bridge J 23327-2 Bolt & Nut

	J 23456 CLUTCH PACK COMPRESSOR
	J 23907 UNIVERSAL SLIDE HAMMER & PULLER J 23907-1 Handle & Weight J 23907-2 Remover J 23907-5 Leg
	J 25018-A INPUT CLUTCH SPRING COMPRESSOR ADAPTER (Use with J 23327)
	J 25025-B PUMP & VALVE BODY ALIGNMENT PIN SET & DIAL INDICATOR POST SET (Use with J 8001 Dial Indicator Set) J 25025-1 M8 x 1.25 Pin J 25025-5 M6 x 1.00 Pin J 25025-6 $\frac{5}{16}$ "-18 Pin J 25025-7A Post
	J 25359-3 #27 TORX DRIVE BIT

J 33382 FIRST, SECOND & REVERSE BAND APPLY PIN GAUGE



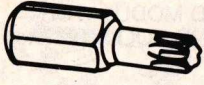

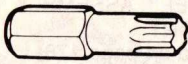
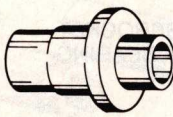




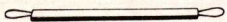


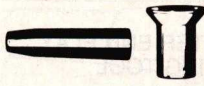

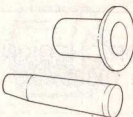
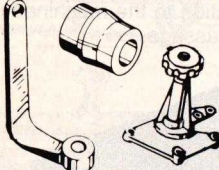
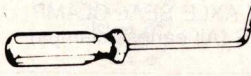
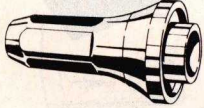
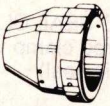
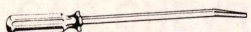
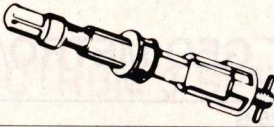
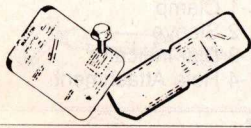
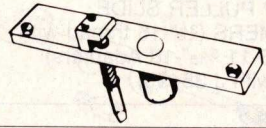
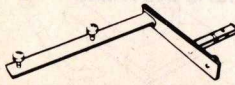

This tool is necessary for gaging the 1-2 band and reverse band apply pin dimensions for selection of the proper length apply pins. The tool is inserted into the servo cover bore and rotated to seat it in the snap ring groove. A specific torque is applied and the pin length is checked using the "go/no go" gage.

SERVICE PARTS:

J 33382-2 Pin
J 33382-10 Pin

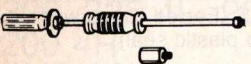
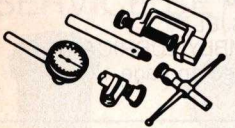


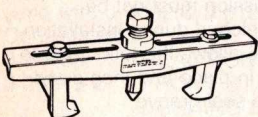

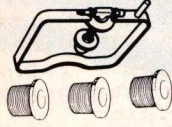
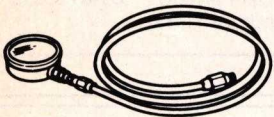
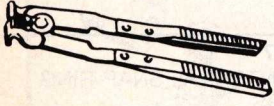
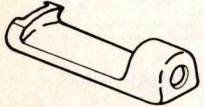
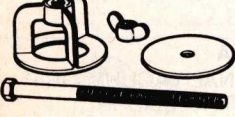
AUTOMATIC TRANSAXLE

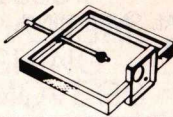


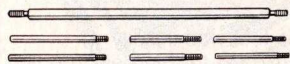
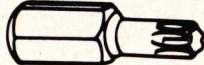
440 T4 (4T60)/F7 TURBO HYDRA-MATIC (CONTINUED)

	J 25359-4 #30 TORX DRIVE BIT		J 28677 DRIVE SPROCKET SUPPORT BEARING INSTALLER
	J 25359-5 #40 TORX DRIVE BIT		J 28698 PUMP BEARING REMOVER AND INSTALLER
	J 25359-8 TORX 1/4" DRIVE BIT HOLDER for J 25359-3 & J 25359-4		J 28712 DRIVE AXLE SEAL PROTECTORS (2 included) Constant velocity drive joint
	J 25359-9 TORX 3/8" DRIVE BIT HOLDER for J 25359-5		J 29130 RIGHT SIDE AXLE SHAFT SEAL INSTALLER
	J 26744-A CLUTCH PISTON SEAL INSTALLER (.015" and .031" wire ends) (Featured on page 201)		J 29369 UNIVERSAL BUSHING & BEARING REMOVERS (Includes J 26941) (Featured on page 202)
	J 26938 AXLE SEAL INSTALLER		J 29569 TURBINE SHAFT SEAL INSTALLER (CHAIN SIDE) J 29569-1 Expander J 29569-2 Compressor
	J 26941 DRIVE SPROCKET SUPPORT BEARING REMOVER (Use with J 23907) (Included in J 29369 Set) (Featured on page 202)		J 29829 TURBINE SHAFT SEAL INSTALLER (CONVERTER SIDE) J 29829-1 Expander J 29829-2 Compressor
	J 26958-A OUTPUT SHAFT ALIGNING AND LOADING TOOL (Use with J 34095) J 26958-10 Adapter Plug J 26958-11 Adapter Bracket J 26958-16 Tool Fixture		J 29836 UNIVERSAL SNAP RING REMOVER
	J 28540-A TORQUE CONVERTER SEAL INSTALLER		J 33162 DRIVE AXLE SEAL PROTECTOR TRIPOT DRIVE JOINT, 1981-current
	J 28585 SNAP RING REMOVER		J 33381 CLUTCH ASSEMBLY/FINAL DRIVE REMOVER & INSTALLER
	J 28664-440 TRANSMISSION HOLDING FIXTURE UPDATE KIT Converts J 28664-A to J 28664-B for 440 T4		J 33386 INPUT SHAFT END PLAY TOOL
	J 28664-B TRANSMISSION HOLDING FIXTURE (Includes J 28664-440) (Use with J 3289-20)		J 34095 OUTPUT SHAFT LOADING TOOL ADAPTER (Use with J 26958-A)

AUTOMATIC TRANSAXLE

440 T4 (4T60)/F7 TURBO HYDRA-MATIC (CONTINUED)

	J 6125-1B SLIDE HAMMER ($\frac{3}{8}$ " - 16 thread with J 6125-11 $\frac{5}{16}$ "-18 Adapters)
	J 8001 DIAL INDICATOR SET J 8001-1 Clamp J 8001-2 Sleeve J 8001-3 Dial Indicator J 8001-4 Hole Attachment
	J 8059 EXTERNAL SNAP RING PLIERS - Parallel jaws
	J 8092 DRIVER HANDLE ($\frac{3}{4}$ "-10 thread)
	J 8433 GOVERNOR DRIVE GEAR PULLER J 8433-2 Leg J 8433-3 Screw
	J 21366 CONVERTER HOLDING STRAP
	J 21369-E CONVERTER LEAK TEST FIXTURE J 21369-40 125c Plug J 26615-3 1.625" Plug J 26615-6 1.375" Plug
	J 21867 UNIVERSAL PRESSURE GAUGE SET (9 ft. hose; 0-300 P.S.I.) J 4872-2 Gauge
	J 22610 DRIVE AXLE SEAL CLAMP PLIERS (Eared clamp with rubber seal)
	J 23129 CONVERTER HOUSING SEAL REMOVER (Use with J 6125-1B)
	J 23327 CLUTCH SPRING COMPRESSOR J 21420-2 Disc J 23327-1 Bridge J 23327-2 Bolt & Nut

	J 23456 CLUTCH PACK COMPRESSOR
	J 23907 UNIVERSAL SLIDE HAMMER & PULLER J 23907-1 Handle & Weight J 23907-2 Remover J 23907-5 Leg
	J 25018-A INPUT CLUTCH SPRING COMPRESSOR ADAPTER (Use with J 23327)
	J 25025-B PUMP & VALVE BODY ALIGNMENT PIN SET & DIAL INDICATOR POST SET (Use with J 8001 Dial Indicator Set) J 25025-1 M8 \times 1.25 Pin J 25025-5 M6 \times 1.00 Pin J 25025-6 $\frac{5}{16}$ "-18 Pin J 25025-7A Post
	J 25359-3 #27 TORX DRIVE BIT

J 33382 FIRST, SECOND & REVERSE BAND APPLY PIN GAUGE





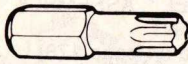
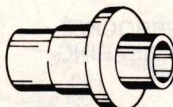




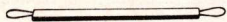
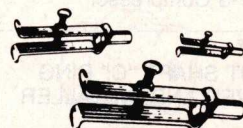

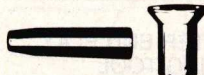

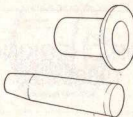
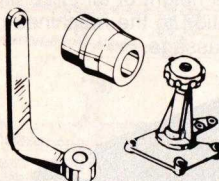
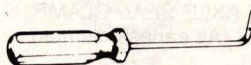
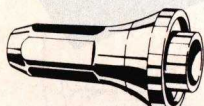
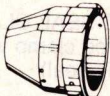
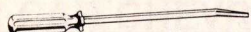
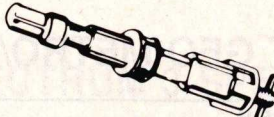

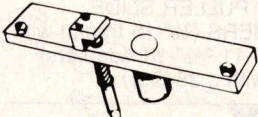

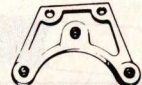
This tool is necessary for gaging the 1-2 band and reverse band apply pin dimensions for selection of the proper length apply pins. The tool is inserted into the servo cover bore and rotated to seat it in the snap ring groove. A specific torque is applied and the pin length is checked using the "go/no go" gage.

SERVICE PARTS:

J 33382-2 Pin
J 33382-10 Pin




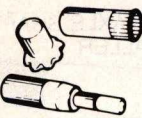
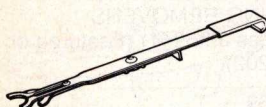
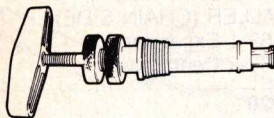

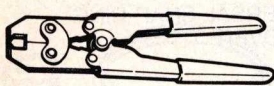
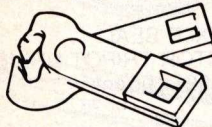
AUTOMATIC TRANSAXLE



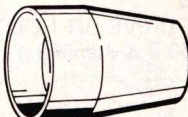
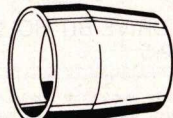

440 T4 (4T60)/F7 TURBO HYDRA-MATIC (CONTINUED)

	J 25359-4 #30 TORX DRIVE BIT		J 28677 DRIVE SPROCKET SUPPORT BEARING INSTALLER
	J 25359-5 #40 TORX DRIVE BIT		J 28698 PUMP BEARING REMOVER AND INSTALLER
	J 25359-8 TORX 1/4" DRIVE BIT HOLDER for J 25359-3 & J 25359-4		J 28712 DRIVE AXLE SEAL PROTECTORS (2 included) Constant velocity drive joint
	J 25359-9 TORX 3/8" DRIVE BIT HOLDER for J 25359-5		J 29130 RIGHT SIDE AXLE SHAFT SEAL INSTALLER
	J 26744-A CLUTCH PISTON SEAL INSTALLER (.015" and .031" wire ends) (Featured on page 201)		J 29369 UNIVERSAL BUSHING & BEARING REMOVERS (Includes J 26941) (Featured on page 202)
	J 26938 AXLE SEAL INSTALLER		J 29569 TURBINE SHAFT SEAL INSTALLER (CHAIN SIDE) J 29569-1 Expander J 29569-2 Compressor
	J 26941 DRIVE SPROCKET SUPPORT BEARING REMOVER (Use with J 23907) (Included in J 29369 Set) (Featured on page 202)		J 29829 TURBINE SHAFT SEAL INSTALLER (CONVERTER SIDE) J 29829-1 Expander J 29829-2 Compressor
	J 26958-A OUTPUT SHAFT ALIGNING AND LOADING TOOL (Use with J 34095) J 26958-10 Adapter Plug J 26958-11 Adapter Bracket J 26958-16 Tool Fixture		J 29836 UNIVERSAL SNAP RING REMOVER
	J 28540-A TORQUE CONVERTER SEAL INSTALLER		J 33162 DRIVE AXLE SEAL PROTECTOR TRIPOT DRIVE JOINT, 1981-current
	J 28585 SNAP RING REMOVER		J 33381 CLUTCH ASSEMBLY/FINAL DRIVE REMOVER & INSTALLER
	J 28664-440 TRANSMISSION HOLDING FIXTURE UPDATE KIT Converts J 28664-A to J 28664-B for 440 T4		J 33386 INPUT SHAFT END PLAY TOOL
	J 28664-B TRANSMISSION HOLDING FIXTURE (Includes J 28664-440) (Use with J 3289-20)		J 34095 OUTPUT SHAFT LOADING TOOL ADAPTER (Use with J 26958-A)

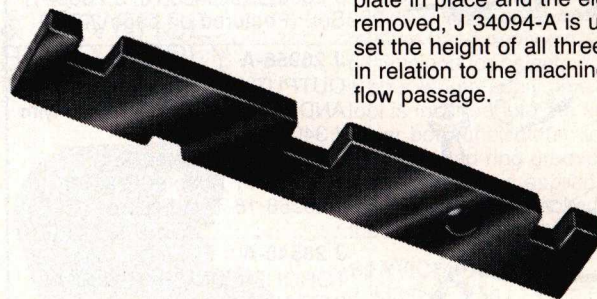
AUTOMATIC TRANSAXLE

440 T4 (4T60)/F7 TURBO HYDRA-MATIC (CONTINUED)

	J 34115 LEFT SIDE AXLE SEAL INSTALLER
	J 34126 DRIVEN SPROCKET SUPPORT BEARING INSTALLER
	J 31429 DRIVEN SPROCKET SUPPORT BEARING REMOVER (Use with J 8092)
	J 34741 INPUT SHAFT SEAL INSTALLER J 34741-1 Installer J 34741-2 Pusher J 34741-3 Compressor
	J 34757 OUTPUT SHAFT "C" RING REMOVER AND INSTALLER
	J 35138 CONVERTER END PLAY MEASURING TOOL
	J 35258 MODULATOR CHECKING TOOL (Thru 1986)
	J 35566 DRIVE AXLE SEAL CLAMP PLIERS (All earless clamps)
	J 35910 DRIVE AXLE SEAL CLAMP PLIERS (Eared clamp with thermo plastic seal)

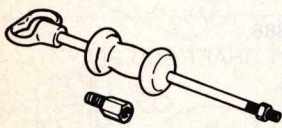
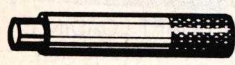
	J 36619 ANEROID MODULATOR CHECKING TOOL (1987 to current)
	J 36850 TRANSJEL™ ASSEMBLY LUBRICANT (Featured on page 178)
	J 37361 INPUT CLUTCH PISTON SEAL PROTECTOR
	J 37362 THIRD CLUTCH PISTON SEAL PROTECTOR
	J 38229 1-2 BAND STOP TOOL

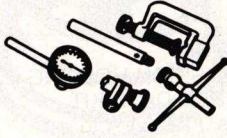
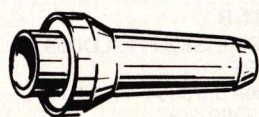
J 34094-A THERMO ELEMENT HEIGHT GAUGE



The 440 T4 has three pins which secure and control the thermostatic element and plate. Their installed heights are critical for proper temperature regulated oil flow. With the plate in place and the element removed, J 34094-A is used to set the height of all three pins in relation to the machined oil flow passage.

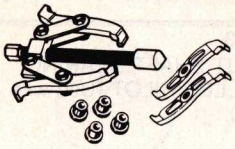
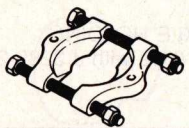
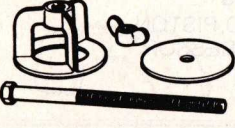



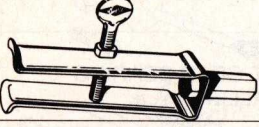
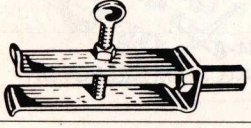
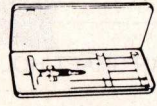
M CAR CHEVROLET GEO METRO/SPRINT

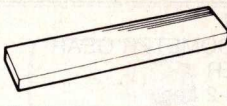
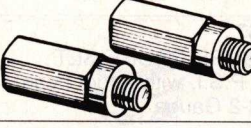
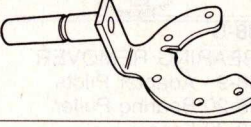

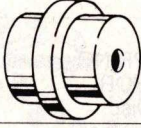
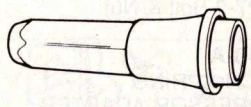


	J 6125-B PUMP PULLER SLIDE HAMMERS (3/8"-16 thread with J 6125-11 5/16"-18 Adapters) (Use with J 35495)
	J 7079-2 DRIVER HANDLE

	J 8001 DIAL INDICATOR SET J 8001-1 Clamp J 8001-2 Sleeve J 8001-3 Dial Indicator J 8001-4 Hole Attachment
	J 9617 PUMP SEAL INSTALLER

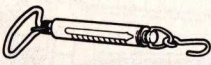
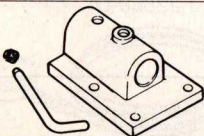
AUTOMATIC TRANSAXLE

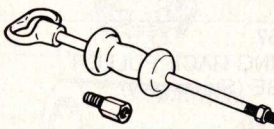
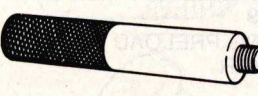
M CAR CHEVROLET GEO METRO/SPRINT (CONTINUED)

	J 22888-D OUTPUT SHAFT BEARING PULLER J 22888-9 Adapter Pilots J 22888-20 Bearing Puller J 22888-30 Legs
	J 22912-01 DIFFERENTIAL SIDE BEARING REMOVER
	J 23327 CLUTCH SPRING COMPRESSOR J 21420-2 Disc J 23327-1 Bridge J 23327-2 Bolt & Nut
	J 23907 SLIDE HAMMER J 23907-1 Handle & Weight J 23907-2 Remover J 23907-5 Leg
	J 25018-A CLUTCH SPRING COMPRESSOR ADAPTER (Use with J 23327)
	J 29036 DIFFERENTIAL SIDE BEARING INSTALLER (Use with J 8092)
	J 29369-1 COUNTERSHAFT BALL BEARING REMOVER (Use with J 23907) (Featured on page 202)
	J 29369-2 COUNTERSHAFT ROLLER BEARING REMOVER (Use with J 23907) (Featured on page 202)
	J 34672 DEPTH MICROMETER

	J 34673 FLAT GAUGE BAR
	J 35495 OIL PUMP PULLER ADAPTERS (Use with J 6125-B)
	J 35525-A HOLDING FIXTURE (Use with J 3289-20)
	J 35534 PISTON COVER DEPRESSOR
	J 35537 COUNTERSHAFT BEARING INSTALLER
	J 35538 AXLE SHAFT SEAL INSTALLER
	J 35608 COUNTERSHAFT INSTALLER
	J 36850 TRANSJEL™ ASSEMBLY LUBRICANT (Featured on page 178)

R CAR CHEVROLET GEO STORM/SPECTRUM 3 SPEED AUTOMATIC

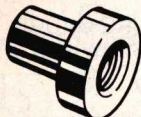
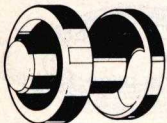
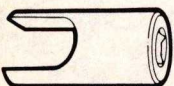
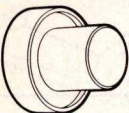
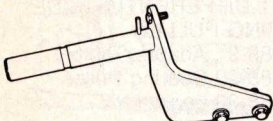
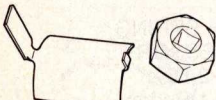
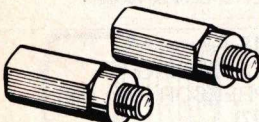
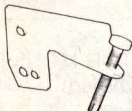

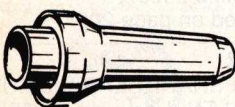
	J 544-01 TENSION SCALE
	J 3289-20 TRANSAXLE HOLDING FIXTURE BASE J 3289-22 Pin J 3289-SSS Set Screw

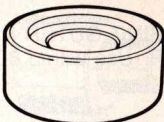
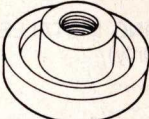
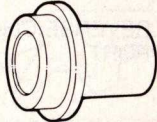
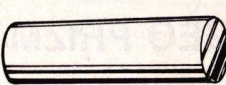
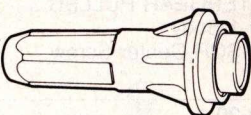
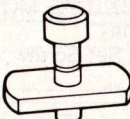
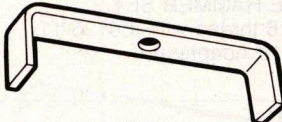
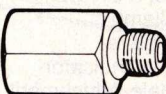

	J 6125-B SLIDE HAMMER
	J 8092 DRIVER HANDLE (3/4"-10 thread)

AUTOMATIC TRANSAXLE

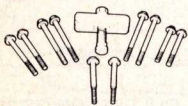
S CAR CHEVROLET GEO PRIZM/NOVA 3 SPEED AUTOMATIC

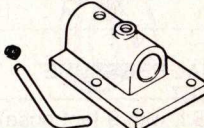
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	J 35399 DIFFERENTIAL SIDE BEARING CUP REMOVER (Use with J 8092)
	J 35400 DIFFERENTIAL SIDE BEARING HOUSING SUPPORT
	J 35405 DIFFERENTIAL PRELOAD WRENCH
	J 35409 DIFFERENTIAL SIDE BEARING INSTALLER
	J 35455 AUTOMATIC TRANSAXLE HOLDING FIXTURE
	J 35467 ONE-WAY CLUTCH TESTER
	J 35495 OIL PUMP PULLER ADAPTER (Use with J 6125-B)
	J 35549-A SECOND COAST BRAKE PISTON COMPRESSOR
	J 35552 DIFFERENTIAL SIDE BEARING CUP INSTALLER (Use with J 8092)
	J 35553 DIFFERENTIAL SIDE BEARING SEAL INSTALLER

	J 35565 INTERMEDIATE SHAFT BEARING INSTALLER
	J 35661 COUNTERGEAR BEARING INSTALLER (Use with J 8092)
	J 35663 COUNTERGEAR BEARING CUP INSTALLER
	J 35664 PINION SHAFT BEARING INSTALLER
	J 35666 PINION SHAFT BEARING SEAL INSTALLER
	J 35679 BAND APPLY PIN GAUGE
	J 35683 FIRST & REVERSE CLUTCH SPRING COMPRESSOR (Use with J 23327)
	J 35752 OIL PRESSURE GAUGE ADAPTER (Use with J 21867)
	J 36850 TRANSJEL™ ASSEMBLY LUBRICANT (Featured on page 178)

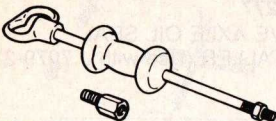
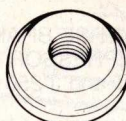


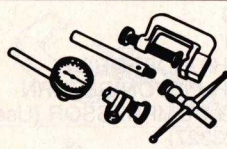
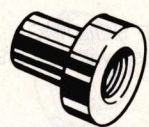
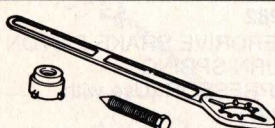
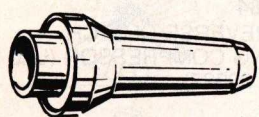
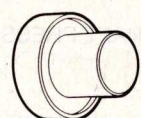
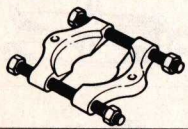
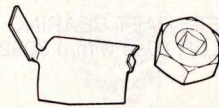
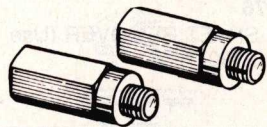
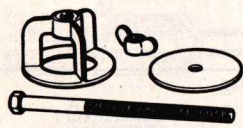


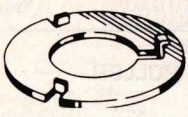
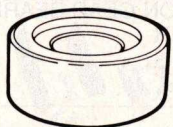
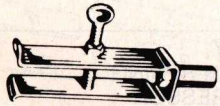
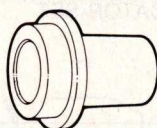
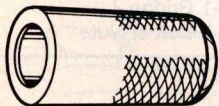
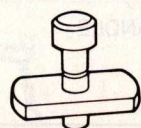
S CAR CHEVROLET NOVA 4 SPEED AUTOMATIC

	J 1859-03 COUNTERGEAR PULLER J 1859-1 Body J 1859-SCR Center Screw
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	J 3289-20 HOLDING FIXTURE BASE (Use with J 37268)
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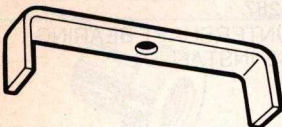
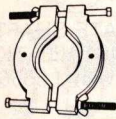
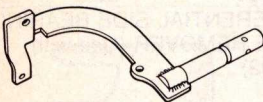
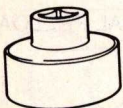
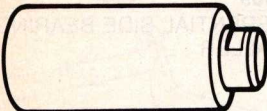


AUTOMATIC TRANSAXLE

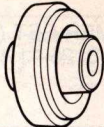

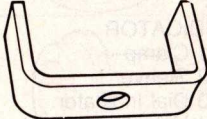
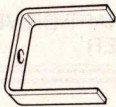
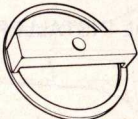
S CAR CHEVROLET NOVA 4 SPEED AUTOMATIC (CONTINUED)

	J 6125-B SLIDE HAMMER SET ($\frac{3}{8}$ "-16 thread with J 6125-11 $\frac{5}{16}$ "-18 Adapters)		J 35287 COUNTERSHAFT BEARING RACE INSTALLER
	J 7057 DIAL INDICATOR EXTENSION (Use with J 8001)		J 35378 INTERMEDIATE SHAFT BEARING INSTALLATION PILOT (Use with J 35565)
	J 8001 DIAL INDICATOR J 8001-1 Clamp J 8001-2 Sleeve J 8001-3 Dial Indicator J 8001-4 Hole Attachment		J 35399 DIFFERENTIAL SIDE BEARING RACE REMOVER (Use with J 8092)
	J 8614-01 COUNTERSHAFT DRIVEN GEAR HOLDER		J 35405 DIFFERENTIAL PRELOAD WRENCH
	J 9617 PUMP SEAL INSTALLER		J 35409 DIFFERENTIAL SIDE BEARING INSTALLER
	J 22912-01 BEARING SPLIT PLATE		J 35467 ONE WAY CLUTCH TESTER
	J 23129 PUMP SEAL REMOVER (Use with J 6125-1B)		J 35495 PUMP PULLER ADAPTER (Use with J 6125-B)
	J 23327 CLUTCH SPRING COMPRESSOR J 21420-2 Disc J 23327-1 Bridge J 23327-2 Bolt & Nut		J 35549-A SECOND COAST BRAKE PISTON COMPRESSOR
	J 23907 SLIDE HAMMER J 23907-1 Handle & Weight J 23907-2 Remover J 23907-5 Leg		J 35552 DIFFERENTIAL SIDE BEARING RACE INSTALLER (Use with J 8092)
	J 25018-A FORWARD & DIRECT CLUTCH PISTON COMPRESSOR (Use with J 23327-1)		J 35565 INTERMEDIATE SHAFT BEARING INSTALLER (Use with J 35378)
	J 26941 COUNTERSHAFT BEARING & DRIVE AXLE SEAL REMOVER (Use with J 23907) (Featured on page 202)		J 35663 COUNTERSHAFT SUPPORT
	J 33411 COUNTER DRIVEN GEAR INSTALLER		J 35679 BAND APPLY PIN GAUGE

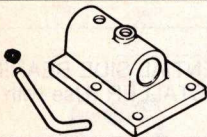


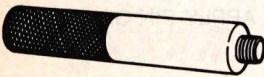
AUTOMATIC TRANSAXLE


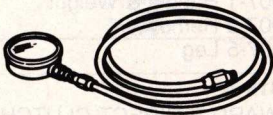
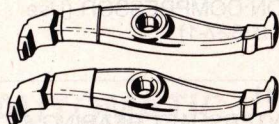

S CAR CHEVROLET NOVA 4 SPEED AUTOMATIC (CONTINUED)

	J 35683 FIRST & REVERSE BRAKE PISTON COMPRESSOR (Use with J 23327-1 and J 25018-A)
	J 36513 LARGE BEARING SPLIT PLATE
	J 37268 TRANSAXLE HOLDING FIXTURE (Use with J 3289-20)
	J 37271 COUNTERSHAFT LOCKNUT SPANNER WRENCH
	J 37273 COUNTERSHAFT PRESSING BUTTON
	J 37274 COUNTERSHAFT BEARING INSTALLER (Use with J 8092)
	J 37276 AXLE SHAFT REMOVER (Use with J 23907)

	J 37277 DRIVE AXLE OIL SEAL INSTALLER (Use with J 7079-2)
	J 37278 COUNTERSHAFT INNER RACE SUPPORT DISC
	J 37279 DIRECT CLUTCH/UNDERDRIVE CLUTCH PISTON RETURN SPRING COMPRESSOR (Use with J 23327)
	J 37282 UNDERDRIVE BRAKE PISTON RETURN SPRING COMPRESSOR (Use with J 23327)
	J 37284 1ST/REVERSE CLUTCH SPRING COMPRESSOR (Use with J 23327)

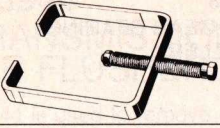
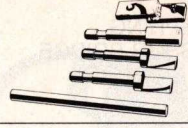
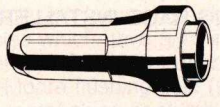
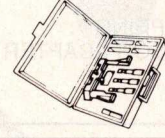
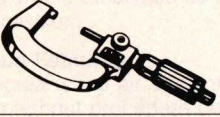

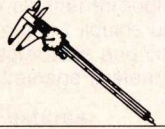
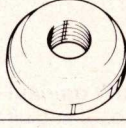

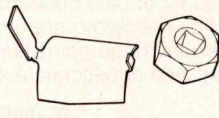
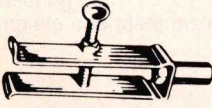


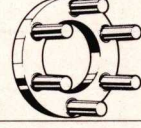
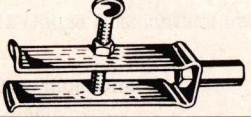
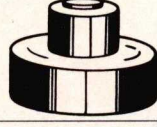
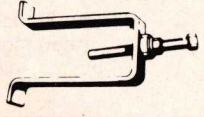
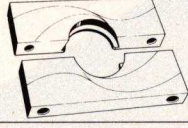
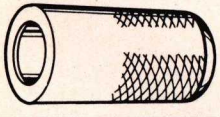
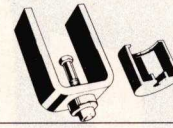
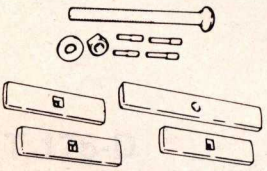
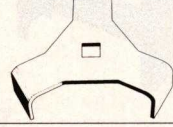
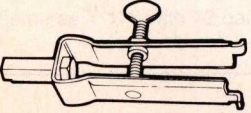
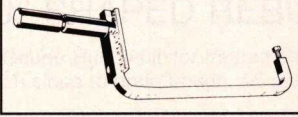
GEO STORM 4 SPEED AUTOMATIC (JF403E)

	J 3289-20 HOLDING FIXTURE BASE
	J 6133-01 REDUCTION GEAR BEARING INSTALLER
	J 8001 DIAL INDICATOR SET
	J 8092 DRIVER HANDLE

	J 8107-2 IDLER GEAR BEARING REMOVER PILOT
	J 21867 UNIVERSAL PRESSURE GAUGE (9 ft. Hose 0-300 P.S.I.) J 4872-2 Gauge
	J 22888-50 BEARING PULLER
	J 23327 CLUTCH SPRING COMPRESSOR J 21420-2 Disc J 23327-1 Bridge J 23327-2 Bolt & Nut

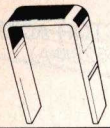
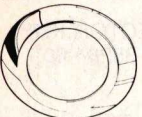
AUTOMATIC TRANSAXLE

GEO STORM 4 SPEED AUTOMATIC (JF403E) (CONTINUED)

	J 25024 SERVO PISTON COMPRESSOR		J 35284-60 SHIM SELECTOR ADAPTERS (Use with J 35284-A)
	J 25337 OIL PUMP SEAL INSTALLER		J 35284-A SHIM SELECTOR KIT (Use with J 35284-60)
	J 26900-1 OUTSIDE MICROMETER		J 35288 SIDE BEARING REMOVER PILOT
	J 26900-7 DIAL CALIPER		J 35290 OUTER BEARING RACE INSTALLER
	J 26900-9 FEELER GAGE		J 35467 ONE-WAY CLUTCH TESTER
	J 26941 AXLE SHAFT SEAL REMOVER		J 36850 TRANSJEL™ ASSEMBLY LUBRICANT (Featured on page 178)
	J 29130 SEAL INSTALLER		J 38288 BEARING REMOVER
	J 29369-2 IDLER GEAR BEARING CUP REMOVER		J 38289 OUTPUT GEAR BEARING PILOT
	J 33367 PULLER BRIDGE		J 38296 REDUCTION GEAR BEARING REMOVER
	J 33411 IDLER GEAR INSTALLER		J 38297 IDLER GEAR REMOVER
	J 35279 CLUTCH COMPRESSOR BRIDGE KIT		J 38298 BRAKE SPRING COMPRESSOR
	J 35280 BEARING OUTER RACE REMOVER		J 38300 HOLDING FIXTURE (Use with J 3289-20)

AUTOMATIC TRANSAXLE

GEO STORM 4 SPEED AUTOMATIC (JF403E) (CONTINUED)

	J 38301-1 CLUTCH SPRING COMPRESSOR BRIDGE
	J 38301-2 CLUTCH SPRING COMPRESSOR ADAPTER

	J 38328 IDLER GEAR BEARING INSTALLER
	J 38412 BEARING RACE INSTALLER

GENERAL

J 35944

"TRANSMISSION" OIL COOLER & LINE FLUSHER

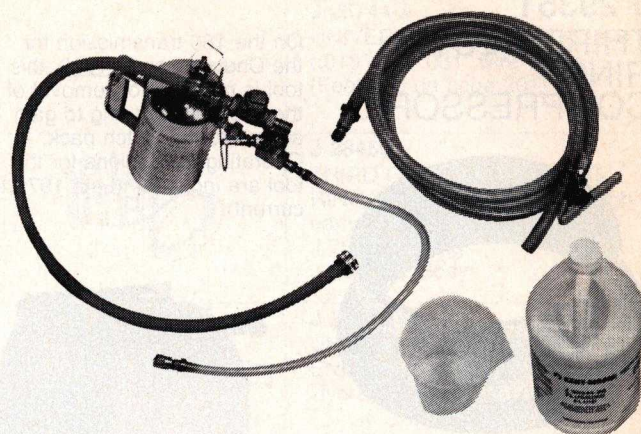
J 35944 is used to remove contaminants from transmission coolers and cooler pipes which may be present due to a transmission failure. The flusher is equipped to connect to all GM vehicles which have 5/16 inverted flare tube connections on the cooler pipes. J 35944 utilizes the flow of tap water combined with Kent-Moore flushing fluid (see below) and shop air to lift and force metal chips or clutch material out of the cooler and lines which would otherwise be introduced into the replaced or repaired transmission.

Unique Features:

- Regular shop air, as high as 120 PSI, used intermittently throughout procedure creates a dramatic surge of water/cleaner through the system to dislodge foreign materials.
- Unlike other liquids used for this purpose, flushing fluid is biodegradable and can be discharged or emptied directly into any drainage system without danger to the environment.

Other Features:

- Chrome-plated brass tank
- Check valve to protect water supply
- Discharge hose assembly
- On-Off valve for water flow
- One gallon of J 35944-20 Flushing Fluid (enough for six flushing operations)
- Measuring cup
- Complete operating instructions



Cooler Flushing Fluid

Flushing fluid is a concentrated blend of detergents which cut transmission fluid to lift contaminants, along with silicates to aid in rinsing and protecting soft metals, such as brass and aluminum. Each flushing operation requires 21 ounces of fluid. Flushing Fluid is supplied in one-gallon plastic bottles.

J 35944-20

1 Gallon

J 35944-CSE

6 Gallons

REBUILDING BENCHES

T 176

INLINE REBUILDING UNIT

12 Gauge Rust inhibitor treated steel with 55 gallon cleaning tank.

Specifications

Length	.15'6"
Width	.36½"
Height (Front)	.35½"
Height (rear)	.34½"
Drain	.¾" std. pipe



T 176-D

INLINE REBUILDING UNIT

Same as T 176 with 72 gallon cleaning tank.

T 177

"U" SHAPED REBUILDING UNIT

12 Gauge Rust Inhibitor treated steel with two 70" L × 36½" W tables which slope to drain trough. 55 gallon cleaning tank.

AUTOMATIC TRANSMISSION

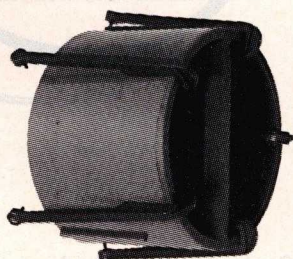
180/180c (3L30) 3-SPEED (STRAUSBOURG)

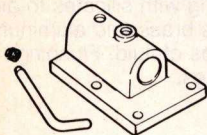
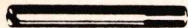
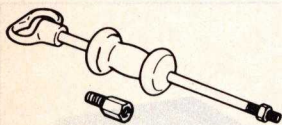
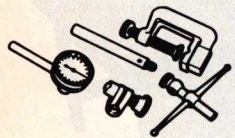
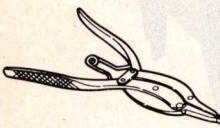
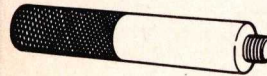

J 29351 THIRD CLUTCH RING COMPRESSOR

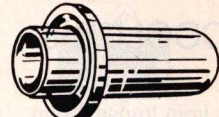

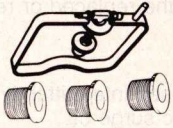
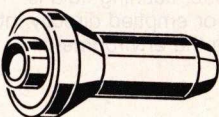
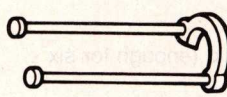

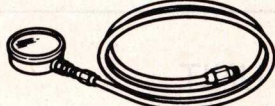
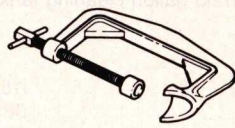
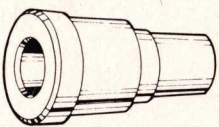
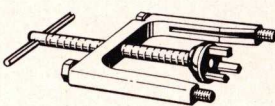
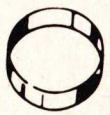


J 29351-1 Compressor
J 29351-2 Ring
J 29351-4 Finger

On the 180 transmission for the Chevette and T1000, this tool is required for removal of the internal snap ring to gain access to the clutch pack. Operating instructions for this tool are included. (Late 1979 to current)

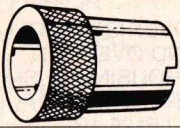


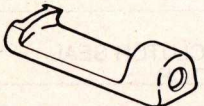
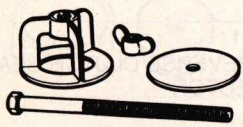
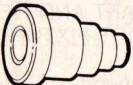


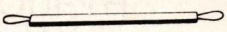
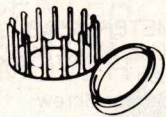
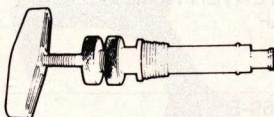


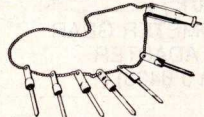
	J 3289-20 TRANSMISSION HOLDING FIXTURE BASE (Use with J 8763-02) J 3289-22 Pin J 3289-SSS Set Screw
	J 3387-2 CONVERTER HOUSING GUIDE PIN (2 required)
	J 6125-B SLIDE HAMMER ($\frac{3}{8}$ "-16 thread with $\frac{5}{16}$ "-18 adapters J 6125-11) (Use with J 23129)
	J 8001 DIAL INDICATOR SET J 8001-1 Clamp J 8001-2 Sleeve J 8001-3 Dial Indicator J 8001-4 Hole Attachment
	J 8059 SNAP RING PLIERS (Parallel jaws)
	J 8092 DRIVER HANDLE ($\frac{3}{4}$ "-10 thread)
	J 8763-02 TRANSMISSION HOLDING FIXTURE (Use with J 3289-20 base) (Featured on page 199) J 8763-7 Side Screw J 8763-20 Top Screw & Shoe

	J 21359-A CONVERTER HOUSING SEAL INSTALLER
	J 21366 CONVERTER HOLDING STRAP
	J 21369-E CONVERTER LEAK TEST FIXTURE J 21369-40 125c Plug J 26615-3 1.625" Plug J 26615-6 1.375" Plug
	J 21426 EXTENSION HOUSING & SPEEDO GEAR SEAL INSTALLER
	J 21427-01 SPEEDOMETER GEAR INSTALLER
	J 21465-17 CONVERTER HOUSING BUSHING REMOVER AND INSTALLER (Use with J 8092)
	J 21867 UNIVERSAL PRESSURE GAUGE SET (0-300 P.S.I. with 9 foot hose) J 4872-2 Gauge
	J 22269-01 ACCUMULATOR PISTON COMPRESSOR J 22269-1 Body J 22269-5 Cup J 22269-6 Screw
	J 23062-14 EXTENSION HOUSING BUSHING REMOVER AND INSTALLER (Use with J 8092)
	J 23075 SERVO AND THIRD CLUTCH PISTON SPRING COMPRESSOR J23075-10 Legs
	J 23080-A SECOND CLUTCH PISTON SEAL INSTALLER

AUTOMATIC TRANSMISSION

180/180c (3L30) 3-SPEED (STRAUSBOURG) (CONTINUED)

	J 23082-01 CONVERTER HOUSING TO OIL PUMP ALIGNING TOOL
	J 23085-A SELECTIVE WASHER AND OIL PUMP HUB TO SECOND CLUTCH GAUGING TOOL
	J 23100 VACUUM MODULATOR WRENCH
	J 23129 CONVERTER HOUSING SEAL AND EXTENSION HOUSING OIL SEAL REMOVER (Use with J 6125-1B)
	J 23327 CLUTCH SPRING COMPRESSOR J 21420-2 Disc J 23327-1 Bridge J 23327-2 Bolt & Nut
	J 25019-2 OIL PUMP FRONT BUSHING INSTALLER (Use with J 8092)

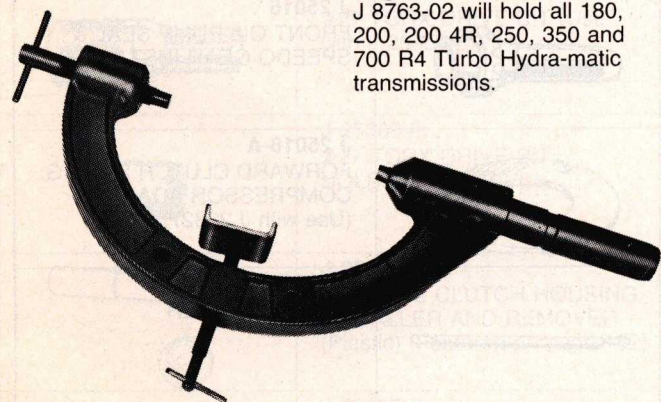
	J 26744-A UNIVERSAL SEAL INSTALLER (.015" and .031" wire ends) (Featured on page 201)
	J 28456 THIRD CLUTCH RETAINING RING COMPRESSOR (Through early 1979) J 28456-1 Ring J 28456-2 Body
	J 35138 UNIVERSAL CONVERTER END PLAY TOOL (All Turbo Hydra-matic torque converters)
	J 36850 TRANSJEL™ ASSEMBLY LUBRICANT (Featured on page 178)
	J 38428 SERVO PISTON RING INSTALLER
	J 38450 THIRD CLUTCH SNAP RING COMPRESSOR

200/200 4R TURBO HYDRA-MATIC

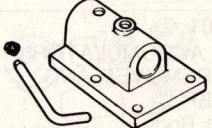
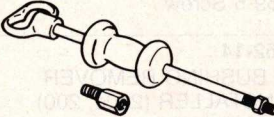
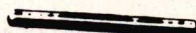


J 8763-02 TRANSMISSION HOLDING FIXTURE

SERVICE PARTS:

J 8763-7 Side Screw
J 8763-20 Top Screw &
Shoe Assembly

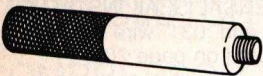
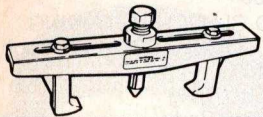

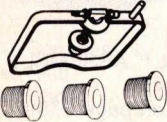
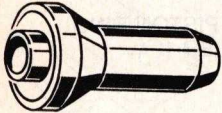
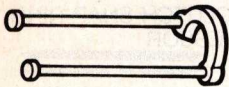
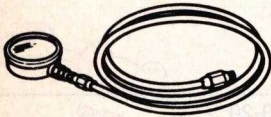
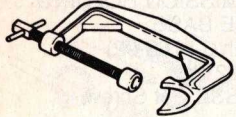
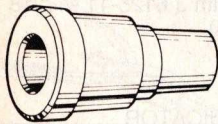
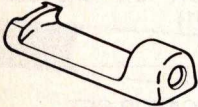
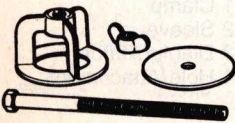


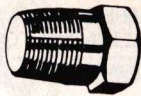
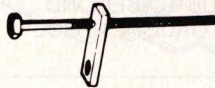
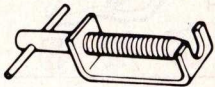
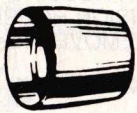

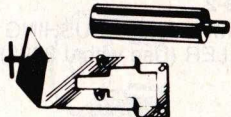
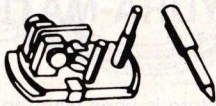
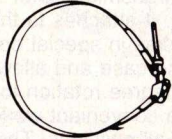

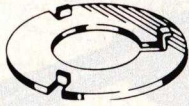
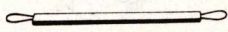
This fixture is used with the J 2189-20 Base to securely hold the transmission for servicing. It attaches to the transmission in special bosses cast in the case and allows a full 360 degree rotation to provide a convenient working height in all positions. The J 8763-02 will hold all 180, 200, 200 4R, 250, 350 and 700 R4 Turbo Hydra-matic transmissions.

	J 3289-20 TRANSMISSION HOLDING FIXTURE BASE (Use with J 8763-02) J 3289-22 Pin J 3289-SSS Set Screw
	J 6125-B SLIDE HAMMERS (3/8"-16 thread with J 6125-11 5/16"-18 Adapters)
	J 7057 DIAL INDICATOR EXTENSION - 2 1/2" long (Use with J 8001)
	J 8001 DIAL INDICATOR SET J 8001-1 Clamp J 8001-2 Sleeve J 8001-3 Dial Indicator J 8001-4 Hole Attachment
	J 8059 SNAP RING PLIERS (Parallel jaws)

AUTOMATIC TRANSMISSION

200/200 4R TURBO HYDRA-MATIC (CONTINUED)

	J 8092 DRIVER HANDLE (3/4"-10 thread)
	J 8433 SPEEDOMETER GEAR PULLER (Use with J 21427-01) J 8433-2 Leg J 8433-3 Center Screw
	J 21366 CONVERTER HOLDING STRAP
	J 21369-E CONVERTER LEAK TEST FIXTURE J 21369-40 125c Plug J 26615-3 1.625" Plug J 26615-6 1.375" Plug
	J 21426 REAR OIL SEAL INSTALLER
	J 21417-01 SPEEDOMETER GEAR PULLER ADAPTER (Use with J 8433)
	J 21867 UNIVERSAL PRESSURE GAUGE SET (0-300 P.S.I. with 9 foot hose) J 4872-2 Gauge
	J 22269-01 CLUTCH ACCUMULATOR PISTON REMOVER AND INSTALLER J 22269-1 Body J 22269-2 Cup J 22269-6 Screw
	J 23062-14 CASE BUSHING REMOVER AND INSTALLER (200c, 200) (Use with J 8092)
	J 23129 CONVERTER HOUSING SEAL INSTALLER (Use with J 6125-1B)
	J 23327 CLUTCH SPRING COMPRESSOR J 21420-2 Disc J 23327-1 Bridge J 23327-2 Bolt & Nut

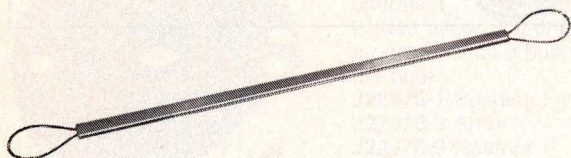
	J 24036 PUMP COVER STATOR SHAFT AND OVERRUN CLUTCH HOUSING BUSHING REMOVER (Use with J 6125-1B)
	J 24684 PRESSURE REGULATOR VALVE SPRING COMPRESSOR (200)
	J 24773-A PUMP REMOVER AND END-PLAY CHECKING FIXTURE J 24773-1 Body J 24773-5 Center Screw
	J 25010 DIRECT CLUTCH SEAL PROTECTOR
	J 25011 LOW-REVERSE CLUTCH SEAL PROTECTOR
	J 25013-A OUTPUT SHAFT AND REAR UNIT SUPPORT FIXTURE (200, 200c) J 25013-1 Support J 25013-5 Bracket
	J 25014 INTERMEDIATE BAND APPLY PIN GAUGE J 25014-1 Pin J 25014-2 Body Assembly J 25014-3 Body
	J 25015 OIL PUMP BODY AND COVER ALIGNMENT BAND
	J 25016 FRONT OIL PUMP SEAL & SPEEDO GEAR INSTALLER
	J 25018-A FORWARD CLUTCH SPRING COMPRESSOR ADAPTER (Use with J 23327)
	J 26744-A SEAL INSTALLER

AUTOMATIC TRANSMISSION

200/200 4R TURBO HYDRA-MATIC (CONTINUED)

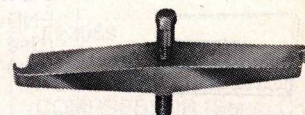
J 26744-A UNIVERSAL SEAL INSTALLER

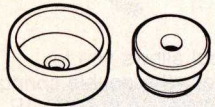

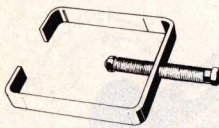
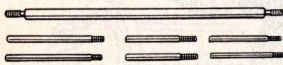
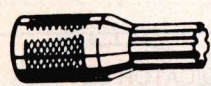

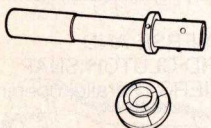
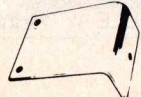
This wire looped tool aids in installation of all automatic transmission seals where a seal protector is not used. Each end has a different diameter wire loop and the round configuration will not cut the seal.


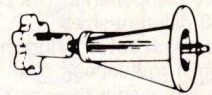
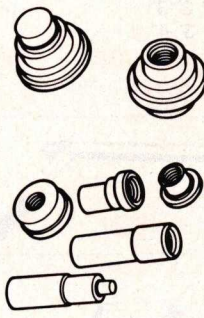



J 29334 FOURTH CLUTCH COMPRESSOR & CENTER SUPPORT REMOVER

In order to remove the center support on the 200 4R THM and access the bottom half of the transmission, J 29334 is required. This tool allows the technician to remove the retaining ring and pull the center support with a slide hammer, such as J 6125-1B.
J 29334-1 Center Support
J 29334-2 Support Bar
J 29334-3 Center Screw


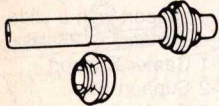
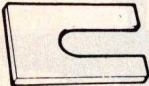


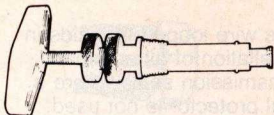

	J 25019-20 FRONT PUMP BUSHING REMOVER & INSTALLER (1987-Current 200 4R) (Use with J 8092)
	J 25022 END PLAY FIXTURE ADAPTER (Use with J 24773-A)
	J 25024-A FORWARD CLUTCH SPRING COMPRESSOR
	J 25025-B OIL PUMP AND VALVE BODY ALIGNMENT PIN AND DIAL INDICATOR POST SET (Use with J 8001 Dial Indicator Set) J 25025-1 M8 x 1.25 Pin J 25025-5 M6 x 1.00 Pin J 25025-6 5/16"-18 Pin J 25025-7A Post (12" Long)
	J 25359-2 #27 TORX DRIVE BIT (Use with J 25359-8)
	J 25359-8 #27 TORX DRIVE BIT HOLDER (1/4" DRIVE)
	J 28542-A REVERSE CLUTCH HOUSING INSTALLER AND REMOVER (Plastic) (Featured on page 182)
	J 29332-A OUTPUT SHAFT SUPPORT FIXTURE (200 4R only)

	J 29335 INNER OVERRUN CLUTCH PISTON SEAL PROTECTOR (200 4R only)
	J 29337 FORWARD AND DIRECT CLUTCH END PLAY CHECKING DEVICE, SHAFT BUSHING REMOVER (200 4R only)
	J 29585 BUSHING SERVICE SET (Use with J 8092) J 29585-1 Forward Clutch Shaft & Bushing Installer & Overrun Clutch Bushings Remover J 29585-2 Center Support Rear Bushing & Direct Clutch Bushings Installer J 29585-3 Direct Clutch Rear Bushing & Pump Bushing Remover J 29585-4 Overrun Clutch Bushings Installer J 29585-5 Pump Bushing & Overdrive Carrier Bushings Installer J 29585-6 Center Support Front Bushing & Direct Clutch Rear Bushing Installer J 29585-7 Pump Cover Stator Shaft Bushings Installer
	J 29696 TURBINE SHAFT SEAL INSTALLER (200 4R only) J 29696-1 Expander J 29696-6 Compressor

AUTOMATIC TRANSMISSION

200/200 4R TURBO HYDRA-MATIC (CONTINUED)

	J 29796 OVERDRIVE UNIT END PLAY ADAPTER (200 4R only)
	J 34008 LO-REVERSE CLUTCH UNIT REMOVER AND INSTALLER (Metal) J 34008-1 Handle J 34008-2 125 Adapter J 34008-3 200, 200 4R, 325, 325 4L Adapter
	J 34725 END PLAY FIXTURE ADAPTER (Use with J 24773-A, 200 4R only)

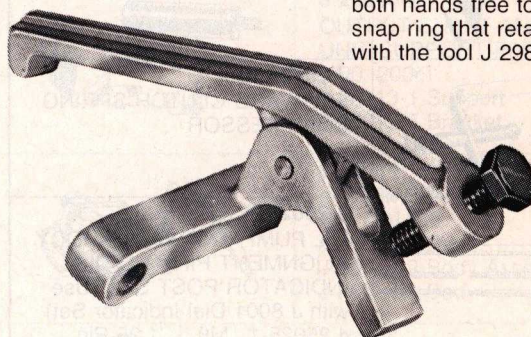
	J 35138 UNIVERSAL CONVERTER END PLAY MEASURING TOOL (All Turbo Hydra-matic torque converters)
	J 36850 TRANSJEL™ ASSEMBLY LUBRICANT (Featured on page 178)

J 29369 UNIVERSAL BUSHING REMOVER SET



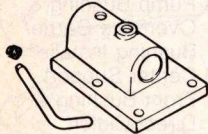

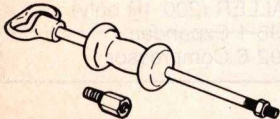
These expandable removers are invaluable for servicing automatic transmissions and other automotive components. The set includes 3 different sized removers which cover a bushing range from 1 to 4 inches. The removers are used with J 2619-01 slide hammer.
J 29369-1 1"-2"
J 29369-2 2"-3"
J 26941 3"-4"


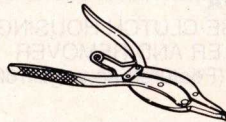

J 29714-A SERVO COVER DEPRESSOR



This tool allows you to compress the double spring servo cover on the 200 4R and 200 THM when the transmission is in the car or on a bench. J 29714-A allows both hands free to remove the snap ring that retains the cover with the tool J 29836.

250/350 TURBO HYDRA-MATIC

	J 3289-20 TRANSMISSION HOLDING FIXTURE BASE (Use with J 8763-02 transmission holding fixture) J 3289-22 Pin J 3289-SSS Set Screw
	J 3387-2 PUMP ALIGNMENT PIN (2 Required)
	J 6125-B SLIDE HAMMERS (Pump removers) (2) J 6125-1B included. 3/8"-16 thread, use with J 29369 and J 23129

	J 8001 DUAL INDICATOR SET (Use with J 25025-B stand set) .001 inch graduations J 8001-1 Clamp J 8001-2 Sleeve J 8001-3 Dial Indicator J 8001-4 Hole Attachment
	J 8059 LOW/REVERSE AND FORWARD CLUTCH SNAP RING PLIERS (Parallel opening jaws)
	J 8092 DRIVER HANDLE 3/4"-10 thread

AUTOMATIC TRANSMISSION

250/350 TURBO HYDRA-MATIC (CONTINUED)

J 22976

GOVERNOR BORE BUSHING SERVICE TOOL SET

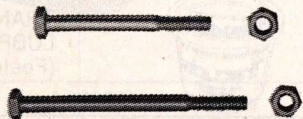


This tool was developed in order to salvage a transmission case with worn governor bore on 250, 350, 375, 400, and 425 THM vehicles. The aid of an alignment arbor enables exact location during the reaming operation. The alignment arbor is then used as a driver to properly install a bushing into the bore.

J22976-1 Bushing Fixture

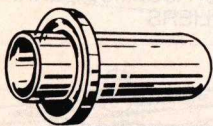
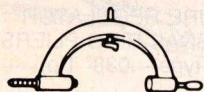
J22976-3 Arbor

J22976-9 Reamer



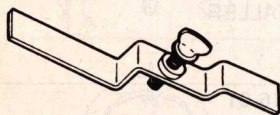
J 8763-02

TRANSMISSION HOLDING
FIXTURE (Use with J 3289-20
Base) (Featured on page 188)
J 8763-7 Side Screw
J 8763-20 Top Screw & Shoe



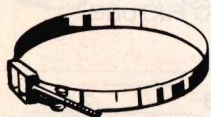
J 21359-A

PUMP SEAL INSTALLER



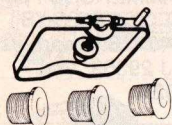
J 21366

CONVERTER HOLDING
STRAP



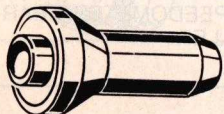
J 21368

PUMP BODY AND COVER
ALIGNMENT BAND



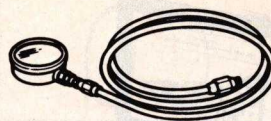
J 21369-E

CONVERTER LEAK TEST
FIXTURE
J 21369-40 125c Plug
J 26615-3 1.625" Plug
J 26615-6 1.375" Plug



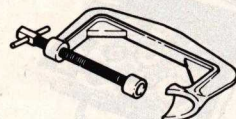
J 21426

REAR OIL SEAL INSTALLER



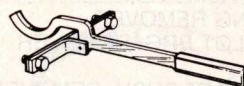
J 21867

UNIVERSAL PRESSURE
GAUGE (0-300 PSI with 9 foot
hose)
J 4872-2 Gauge



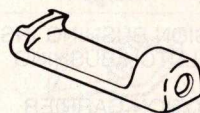
J 22269-01

INTERMEDIATE SERVO
PISTON AND DIRECT CLUTCH
2-3 ACCUMULATOR PISTON
COMPRESSOR
(Use with J 24675 Adapter)
J 22269-1 Body
J 22269-2 Cup
J 22269-6 Screw



J 23069

INTERMEDIATE CLUTCH 1-2
ACCUMULATOR PISTON
COMPRESSOR (Servo Cover)



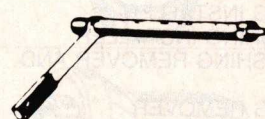
J 23129

CONVERTER HOUSING SEAL
REMOVER (Use with
J 6125-1B)



J 23327

FORWARD AND LOW
REVERSE CLUTCH PISTON
SPRING COMPRESSOR
(Includes J 23327-1, 4 3/8" O.D.
forward clutch direct clutch
piston spring compressor
adapter)
J 21420-2 Disc
J 23327-1 Bridge
J 23327-2 Bolt & Nut



J 24367

INTERMEDIATE BAND
ADJUSTMENT TOOL (250 only)



J 24466

MODULATOR CHECKING
TOOL



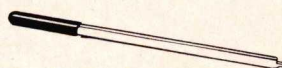
J 24675

DIRECT CLUTCH 2-3
ACCUMULATOR PISTON
COMPRESSOR ADAPTER
(Use with J 22269-01
compressor)



J 25025-B

PUMP AND VALVE BODY
ALIGNMENT PIN AND DIAL
INDICATOR POST SET (Use
with J 8001 dial indicator set)
J 25025-1 M8 x 1.25 Pin
J 25025-5 M6 x 1.00 Pin
J 25025-6 5/16"-18 Pin
J 25025-7A Post (12" long)



J 26507

LOW/REVERSE CLUTCH
SUPPORT REMOVER

AUTOMATIC TRANSMISSION


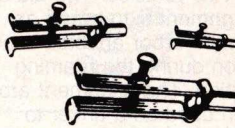
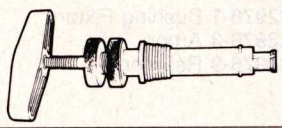

250/350 TURBO HYDRA-MATIC (CONTINUED)

J 23062-01 BUSHING SERVICE SET



Consists of:

- J 23062-2 TRANS. OIL PUMP COVER BUSH. INST.
- J 23062-5 TRANS. OUTPUT RING GEAR BUSH. INST.
- J 23062-6 SPECIAL CONTAINER ASS'Y
- J 23062-8 TRANS. CASE BUSHING REMOVER
- J 23062-10 DIRECT CLUTCH BUSHING REMOVER
- J 9534-01 DISTRIBUTOR SHAFT PILOT BRG. REMOVER
- J 21465-13 HANDLE EXTENSION
- J 21465-15 SUN GEAR & STATOR SHAFT BUSH. REMOVER
- J 21465-17 TRANS. PUMP BUSHING REMOVER & INSTALLER
- J 23062-14 STATOR SHAFT & EXTENSION BUSHING INST.
- J 23062-15 TRANS. CASE & DIRECT CLUTCH BUSHING INST.
- J 23062-16 TRANS. SUN GEAR & REACTION CARRIER BUSH. INST. & REM.

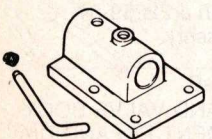
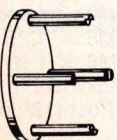
	J 26744-A UNIVERSAL LIP SEAL INSTALLER 0.15" and .031" wire ends
	J 29369 UNIVERSAL BUSHING REMOVERS (Set of 3 sizes) Use with J 6125-1B slide hammer) (Featured on page 202)
	J 35138 UNIVERSAL CONVERTER END PLAY MEASURING TOOL (All Turbo Hydra-matic torque converters)
	J 36850 TRANSJEL™ ASSEMBLY LUBRICANT (Featured on page 178)



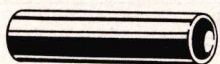
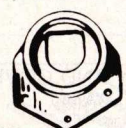
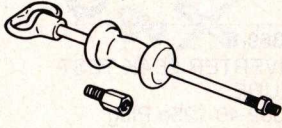

375/400 (3L80) 475 (3L80-HD) TURBO HYDRA-MATIC

J 21465-01 400 THM BUSHING SERVICE SET (Use with J 8092 and J 2619-01)

Consists of:

- J 21465-1 OUTPUT SHAFT BUSHING INSTALLER
- J 21465-2 PUMP COVER BUSHING INSTALLER
- J 21465-3 PUMP COVER BUSHING INSTALLER
- J 21465-5 SUN GEAR SHAFT BUSHING INSTALLER
- J 21465-6 CENTER SUPPORT BUSHING REMOVER AND INSTALLER
- J 21465-8 TRANS. CASE BUSHING REMOVER
- J 21465-9 TRANS. CASE BUSHING INSTALLER ADAPTER
- J 21465-10 TRANS. CASE BUSHING STAKING TOOL
- J 21465-13 HANDLE EXTENSION
- J 21465-15 SUN GEAR AND STATOR SHAFT BUSHING REMOVER
- J 21465-16 OUTPUT SHAFT BUSHING REMOVER
- J 21465-17 OIL PUMP BODY BUSHING REMOVER & INSTALLER
- J 21465-25 SPECIAL CONTAINER ASSEMBLY

	J 3289-20 TRANSMISSION HOLDING FIXTURE BASE (Use with J 8763-02 Holding fixture) J 3289-22 Pin J 3289-SSS Set Screw
	J 4670-01 FORWARD CLUTCH SPRING COMPRESSOR (Use with J 21664 adapters)

	J 5403 PRESSURE REGULATOR VALVE SNAP RING PLIERS (Internal type - .038" Tip)
	J 5586-A CLUTCH ASSEMBLY SNAP RING PLIERS
	J 5590 SPEEDOMETER GEAR INSTALLER
	J 6116-01 REAR GEAR ASSEMBLY HOLDING FIXTURE
	J 6125-B SLIDE HAMMERS (Oil pump removers) (2) J 6125-1B included, 3/8"-16 thread, use with J 23129, J 29369, and J 21795-02.
	J 6133-01 REAR OIL PUMP BEARING AND SPEEDOMETER GEAR INSTALLER

AUTOMATIC TRANSMISSION

375/400 (3L80) 475 (3L80-HD) TURBO HYDRA-MATIC (CONTINUED)

J 22269-01 ACCUMULATOR PISTON REMOVER



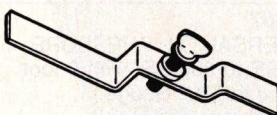
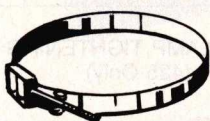
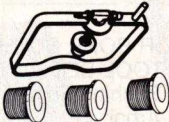
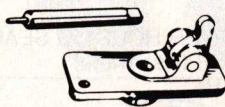

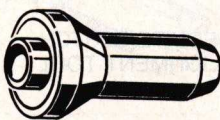
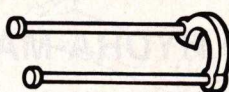
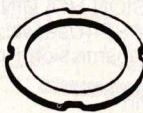





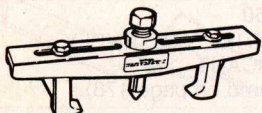
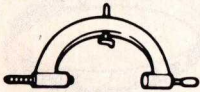
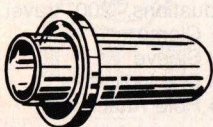

This tool provides an easy means of removal, disassembly and installation of the servos. J 22269-01 also is used for disassembly of the accumulator piston.
(Use with J 24675)

J 22269-1 Body

J 22269-5 Cup

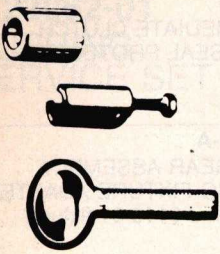
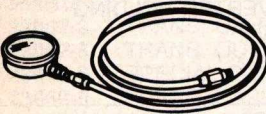
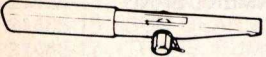
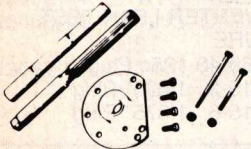
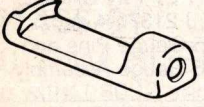
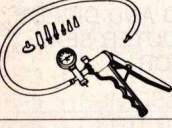
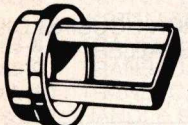
J 22269-6 Screw

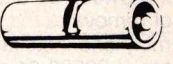

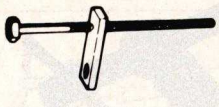
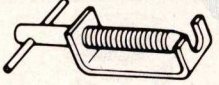
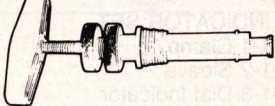
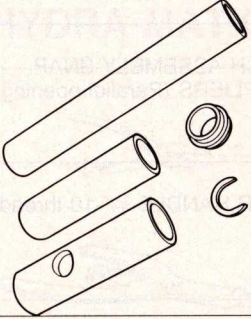

	J 21363 INTERMEDIATE CLUTCH INNER SEAL PROTECTOR
	J 21364-A REAR GEAR ASSEMBLY HOLDING FIXTURE ADAPTER (Use with J 6116-01 fixture)
	J 21366 CONVERTER HOLDING STRAP
	J 21368 PUMP BODY AND COVER ALIGNMENT BAND
	J 21369-E CONVERTER LEAK TEST FIXTURE J 21369-40 125c Plug J 26615-3 1.625" Plug J 26615-6 1.375" Plug
	J 21370-A BAND APPLY PIN GAUGE Includes: J 21370-4 and J 21370-5 Gauge Pins and J 21370-6 Gauge Assembly
	J 21409 FORWARD AND DIRECT CLUTCH OUTER SEAL PROTECTOR
	J 21426 EXTENSION HOUSING OIL SEAL INSTALLER
	J 21427-01 SPEEDOMETER GEAR PULLER ADAPTER (Use with J 8433)
	J 21664 FORWARD CLUTCH COMPRESSOR ADAPTER (Use with J 4670-01 Compressor)

	J 8001 DIAL INDICATOR SET J 8001-1 Clamp J 8001-2 Sleeve J 8001-3 Dial Indicator J 8001-4 Hole Attachment
	J 8059 CLUTCH ASSEMBLY SNAP RING PLIERS (Parallel opening jaws)
	J 8092 DRIVER HANDLE 3/4"-10 thread
	J 8433 SPEEDOMETER GEAR PULLER (Use with J 21427-01) J 8433-2 Leg J 8433-3 Center Screw
	J 8763-02 TRANSMISSION HOLDING FIXTURE (Use with J 3289-20 Base) (Featured on page 188) J 8763-7 Slide Screw J 8763-20 Top Screw & Shoe
	J 21359 EXTENSION HOUSING AND OIL PUMP SEAL INSTALLER
	J 21362 FORWARD AND DIRECT CLUTCH INNER SEAL PROTECTOR

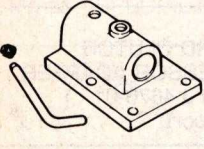
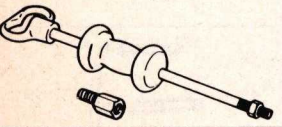

AUTOMATIC TRANSMISSION

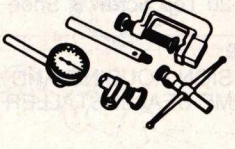
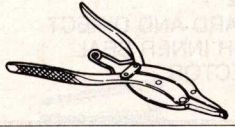

375/400 (3L80) 475 (3L80-HD) TURBO HYDRA-MATIC (CONTINUED)

	J 21795-02 REAR GEAR ASSEMBLY REMOVER AND INSTALLER (Use with J 6125-1B and J 21795-4) J 21795-1 Sleeve J 21795-2 Clamp J 21795-4 Thumb Screw Cadillac only (Use with J 21795-02 and J 6125-1B)
	J 21867 UNIVERSAL OIL PRESSURE GAUGE (0-300 PSI with 9 foot hose) J 4872-2 Gauge
	J 22716 BOOT CLAMP TIGHTENING WRENCH (425 Only)
	J 22976 GOVERNOR BORE BUSHING SERVICE TOOL SET J 22976-1 Bushing Fixture J 22976-3 Arbor J 22976-9 Reamer
	J 23129 CONVERTER HOUSING SEAL REMOVER (Use with J 6125-1B)
	J 23738-A MODULATOR VACUUM LEAK TESTER (Hand operated vacuum pump)
	J 24396 INTERMEDIATE CLUTCH PACK ALIGNMENT TOOL

	J 24466 MODULATOR CHECKING TOOL
	J 24675 ACCUMULATOR PISTON ADAPTER (Use with J 22269-01)
	J 24684 PRESSURE REGULATOR VALVE REMOVER AND INSTALLER
	J 24773-A OIL PUMP REMOVER & END PLAY CHECKING TOOL
	J 35138 UNIVERSAL CONVERTER END PLAY MEASURING TOOL All Turbo Hydra-matic torque converters
	J 36352 SPEED SENSOR ROTOR INSTALLATION TUBES J 36352-2 Tube - 400 THM Long Shaft J 36352-3 Tube - 400 THM Short Shaft J 36352-4 Installation Depth "C" Washer - 700 R4 J 36352-5 Oil Slinger Adapter - 700 R4 J 36352-6 Tube - 700 R4
	J 36850 TRANSJEL™ ASSEMBLY LUBRICANT (Featured on page 178)

700 R4 (4L60) TURBO HYDRA-MATIC

	J 3289-20 TRANSMISSION HOLDING FIXTURE BASE (Use with J 8763-02 transmission Holding fixture) J 3289-22 Pin J 3289-SSS Set Screw
	J 6125-B SLIDE HAMMER (3/8"-16 thread with 5/16"-18 adapters, J 6125-11 use with J 23129 and J 29369)
	J 6133-01 SPEEDO GEAR INSTALLER

	J 8001 DIAL INDICATOR SET .001 inch graduations, .200" travel. J 8001-1 Clamp J 8001-2 Sleeve J 8001-3 Dial Indicator J 8001-4 Hole Attachment
	J 8059 REVERSE INPUT RETAINER RING PLIERS Parallel opening jaws
	J 8092 DRIVER HANDLE 3/4"-10 thread

700 R4 (4L60) TURBO HYDRA-MATIC (CONTINUED)

J 34196-A

700 R4 BUSHING SERVICE SET

These tools are required for proper service and overhaul of the 700 R4 THM and are designed to remove the bushings without any component damage and install the bushings to the correct depths in their bores. Complete instructions are included with the set. Several previously released tools which are not included with J 34196-A are also required to completely service the bushings in the 700 R4. Their part numbers are: J 6125-1B, J 8092, J 23062-14, J 23907, J 24036, J 25019-4, J 25019-9, J 25019-12, J 25019-14, J 25019-16, J 29369-1 and J 29369-2. Refer to the appropriate General Motors service manual for their specific descriptions and applications.

Consists of:

- J 34196-1** REACTION SUN GEAR BUSHING REMOVER AND INSTALLER
- J 34196-2** STATOR SHAFT FRONT AND REAR BUSHING INSTALLER
- J 34196-3** REACTION CARRIER SHAFT AND REAR REVERSE INPUT CLUTCH HOUSING BUSHING INSTALLER
- J 34196-4** CASE EXTENSION AND INPUT SUN GEAR FRONT BUSHING INSTALLER
- J 34196-5** INPUT SUN GEAR FRONT AND REAR BUSHING REMOVER
- J 34196-6** CASE AND INPUT SUN GEAR REAR BUSHING INSTALLER
- J 34196-7** SPECIAL STORAGE CASE
- J 34196-10** CASE BUSHING INSTALLER
- J 34196-12** OIL PUMP BUSHING INSTALLER (FOR PUMPS BUILT AFTER 1-6-86)





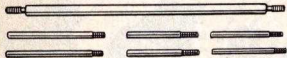

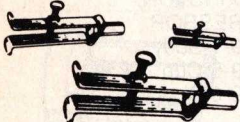
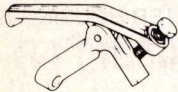

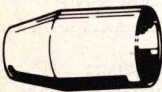
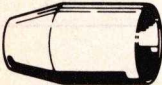




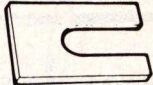
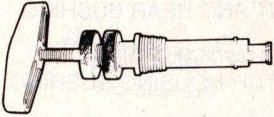
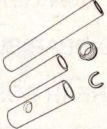
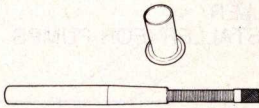

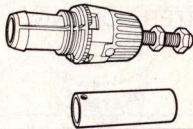
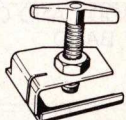
	J 8763-02 TRANSMISSION HOLDING FIXTURE (Use with J 3289-20 Base) J 8763-7 Side Screw J 8763-20 Top Screw & Shoe
	J 21366 CONVERTER HOLDING STRAP
	J 21368 OIL PUMP BODY AND COVER ALIGNMENT BAND
	J 21369-E CONVERTER LEAK TEST FIXTURE J 21369-40 125c Plug J 26615-3 1.625" Plug J 26615-6 1.375" Plug
	J 21426 OUTPUT SHAFT SLEEVE AND CASE EXTENSION OIL SEAL INSTALLER
	J 21427-01 SPEEDO GEAR PULLER

	J 21867 UNIVERSAL PRESSURE GAUGE (0-300 P.S.I. with 9 foot hose) J 4872-2 Gauge
	J 22269-01 SERVO PISTON COMPRESSOR J 22269-1 Body J 22269-5 Cup J 22269-6 Screw
	J 23129 CONVERTER HOUSING SEAL REMOVER (Use with J 6125-1B)
	J 23327 LOW AND REVERSE CLUTCH SPRING COMPRESSOR (Use with J 25018-A) J 21420-2 Disc J 23327-1 Bridge J 23327-2 Bolt & Nut
	J 23456 CLUTCH SPRING COMPRESSOR PRESS

AUTOMATIC TRANSMISSION

700 R4 (4L60) TURBO HYDRA-MATIC (CONTINUED)

	J 24773-A OIL PUMP REMOVER AND END PLAY FIXTURE (Use with J 25022 adapter and J 34725 adapter) J 24773-1 Body J 24773-5 Center Screw
	J 25016 OIL PUMP SEAL INSTALLER
	J 25018-A INPUT CLUTCH SPRING COMPRESSOR ADAPTERS (Use with J 23327)
	J 25022 END PLAY FIXTURE ADAPTER (245mm Converter) (Use with J 24773-A fixture)
	J 25025-B PUMP & VALVE BODY ALIGNMENT PIN SET & DIAL INDICATOR STAND SET (Use with J 8001 dial indicator set) J 25025-1 M8 x 1.25 Pin J 25025-5 M6 x 1.00 Pin J 25025-6 5/16"-18 Pin J 25025-7A Post (12" long)
	J 26744-A UNIVERSAL SEAL INSTALLER (.015" and .031" wire ends)
	J 29369 UNIVERSAL BUSHING REMOVERS (Set of 3 sizes use with J 6125-1B slide hammer) (Featured on page 202)
	J 29714-A SERVO COVER DEPRESSOR
	J 29837 OUTPUT SHAFT SUPPORT FIXTURE
	J 29882 OVERRUN CLUTCH INNER SEAL PROTECTOR
	J 29883 FORWARD CLUTCH INNER SEAL PROTECTOR

	J 33037 INTERMEDIATE BAND APPLY PIN GAUGE J 33037-2 Rod
	J 34196-12 PUMP BUSHING INSTALLER FOR PUMPS BUILT AFTER 1-6-86 (Use with J 8092)
	J 34725 END PLAY FIXTURE ADAPTER (298mm Converter) (Use with J 24773-A)
	J 35138 UNIVERSAL CONVERTER END PLAY MEASURING TOOL (All Turbo Hydra-matic torque converters)
	J 36352 SPEED SENSOR ROTOR INSTALLER
	J 36418-A TURBINE SHAFT SEAL INSTALLER Service Parts: J 36418-1 Seal Protector J 36418-2A Seal Sizer
	J 36850 TRANSJEL™ ASSEMBLY LUBRICANT (Featured on page 178)
	J 38119 REAR EXTENSION BUSHING REMOVER & INSTALLER
	J 38417 SPEED SENSOR REMOVER (Truck only)

J 34627 SNAP RING REMOVER AND INSTALLER



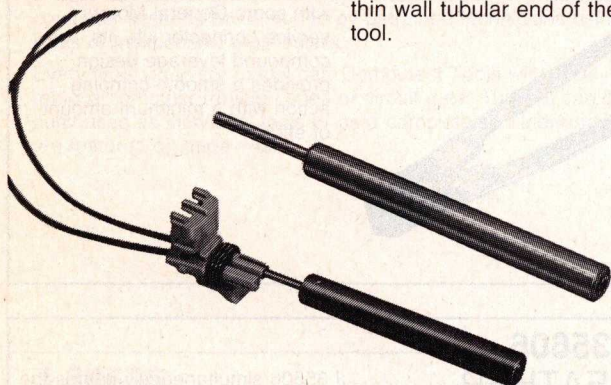
These snap ring pliers have specially modified tips bent at 90 degrees which are small enough to fit into a snap ring groove. This greatly simplifies removal and installation of snap rings that are located in tight clearance areas. J 34627 was originally developed for the snap ring on the output shaft in the 700 R4 Turbo Hydra-Matic transmission. By using this tool to carefully expand and install the output shaft snap ring, the problem of over expanding this ring is greatly reduced.

GENERAL DIAGNOSTIC, WIRING HARNESS, ACCESSORIES

J 28742-A

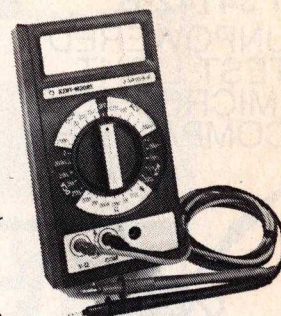
WEATHER-PACK II TERMINAL REMOVER

This tool is designed to allow easy removal of the Weather Pack II terminals. Included is a protective cap for the precision thin wall tubular end of the tool.



J 34029-A

DIGITAL MULTIMETER



The J 34029-A is designed for years of dependable service under the most rugged shop conditions. The single rotary dial incorporates a patented design eliminating friction wear which reduces the life of typical wafer type switches. Other superior design features include extra overload protection, 100% factory testing of all ranges and functions, a specially designed case which seals out contaminants encountered in the field.

Features:

- In Circuit Diode Test • 0.50% Basic DCV Accuracy • Easy To Read LCD 0.5" High Digits • 2000 Hour Battery Life - Standard 9 Volt • Audible Continuity Beeper • 22 Mega Ohm Input Impedance • In Circuit Measurements • Spare Fuse • Test Leads With Alligator Clips • Patented Long Life Rotary Dial • Built-In Multiposition Tilt Bail • Plastic Storage/Carrying Case • Complete Instructions

ACCESSORIES FOR J 34029-A

J 34029-15

EZ MINI-HOOK TEST LEAD SET

Contains a red and black 36" long spring-loaded hook end which can be used to fit over up to .059 diameter components when continuous hook up is required.

J 34029-248

DELUXE TEST LEAD KIT

Includes test leads with push-on probes plus banana plug extensions insulated alligator clips, extension probe tips, medium size hook type prods, large size hook type prods all in a nylon pouch with velcro closures.

J 34898

HIGH CURRENT SHUNT

J 34898 is a calibrated resistance wire which is connected in series with the electrical accessory to be tested and plugged into the J 34029-A Multimeter. The multimeter range switch is set on the 200 MV DC scale. This will provide a direct readout of the accessory current draw in .1 amp increments. From 0 to 99 amps.

J 35590

CURRENT CLAMP

SERVICE PARTS FOR J 34029-A

J 34029-13

Replacement Test Lead Set Consists of:
(Available Separately)

J 34029-14 (2) Alligator Clips

J 34029-18 (2) Probe Tips

J 34029-19 (2) Test Lead Wires

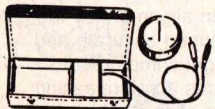
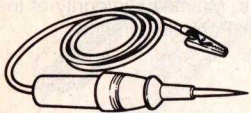
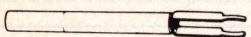
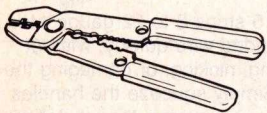
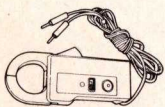
J 34029-20 (2) Banana Plug Extensions

J 34029-21 (1) Storage Pouch

J 34029-2 Molded Storage Case

J 34029-7 Instruction Manual

J 34029-12 Special 2 Amp Fuse (Package of 4)

	J 8681-A UNIVERSAL SHORT CHECKER
	J 21008-A SELF POWERED TEST LIGHT
	J 22727 ELECTRICAL TERMINAL REMOVER
	J 25563 WIRE CUTTER, STRIPPER & CRIMPER
	J 35590 CURRENT CLAMP (0-600 Amps)

J 33095

TERMINAL REMOVER MICRO-PACK COM-PACK III AND ECM EDGE BOARD CONNECTORS

General Motors Vehicles with Electronic engine controls incorporate Micro-Pack, Com-Pack III and ECM Edge Board Connectors on the wiring harnesses. J 33095 is designed to allow easy removal of the terminals when servicing these connectors.

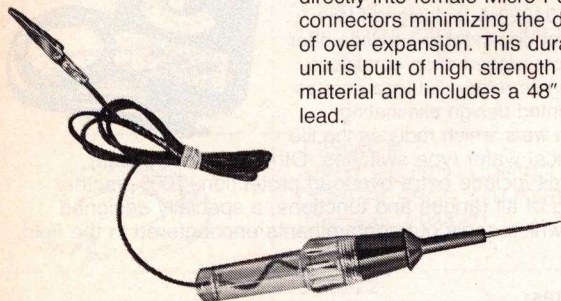


CHASSIS ELECTRICAL

GENERAL DIAGNOSTIC, WIRING HARNESS, ACCESSORIES (CONTINUED)

J 34142-B UNPOWERED TEST LIGHT (MICRO-PACK COMPATIBLE)

A test light such as J 34142-B is required to perform many of the diagnostic procedures on General Motors electronic control systems. J 34142-B has a unique specially shaped probe tip which will plug directly into female Micro-Pack connectors minimizing the danger of over expansion. This durable unit is built of high strength material and includes a 48" long lead.



J 34764 AUTO FUSE TESTER & REMOVER/ INSTALLER

This handy tool tests, removes, and installs both blade and glass type automotive fuses. It features adjustable contacts and a red light which glows upon contact with a bad fuse. This slender hand tool makes it easy for the technician to check and service fuses within the tight confines of the fuse block area.



J 35500 DIGITAL MULTIMETER

This attractively priced digital multimeter provides the accuracy and features of more expensive meters plus the convenience of autoranging. Simply set the rotary switch to Volts or Resistance and the J 35500 automatically sets the required range.



Features:

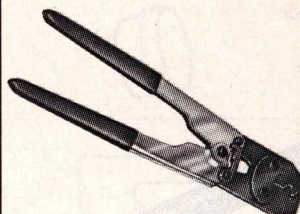
- Autoranging
- 0.50% Basic DCV Accuracy
- 10 Amp AC/DC Capability
- Audible Continuity Beeper
- 10 Mega Ohm Input Impedance
- Low Power Ohm Range For In Circuit Measurements
- Test Leads With Alligator Clips
- Includes Molded Plastic Storage/Carrying Case
- Complete Instructions

Service Parts

- J 35500-20 Test Leads and Alligator Clips
- J 35500-25 .5 Amp Fuse (Package of 4)

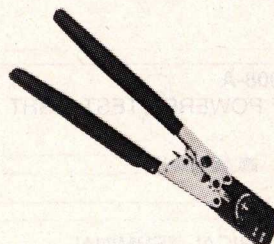
J 35603 TERMINAL CRIMPING TOOL

This quality crimping tool is designed to crimp many Packard terminals and the new wire splices which are being supplied with some General Motors service connector kits. Its compound leverage design provides a smooth crimping action with a minimum amount of effort.



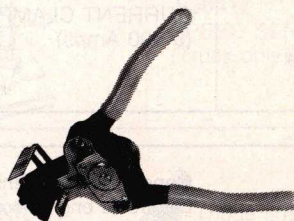
J 35606 WEATHER- PACK TERMINAL CRIMPER

J 35606 simultaneously crimps the wire to terminal and terminal to Weather-Pack Boot quickly and easily. Wire, terminal, and boot are held in alignment by the guide block ensuring accurate and weathertight crimps. Tool incorporates a self-releasing ratchet for consistent application pressure. Maintains integrity of the Weather-Pack design and function.



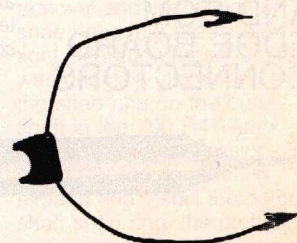
J 35615 AUTOMATIC WIRE STRIPPER

J 35615 strips 8 to 22 gauge solid or stranded wire quickly, without crushing, nicking, or damaging the wire. Simply squeeze the handles to strip and remove the insulation.



J 36169 JUMPER WIRE

This tool consists of a fuse holder with test leads and is used for bypassing open circuits when diagnosing electrical problems.

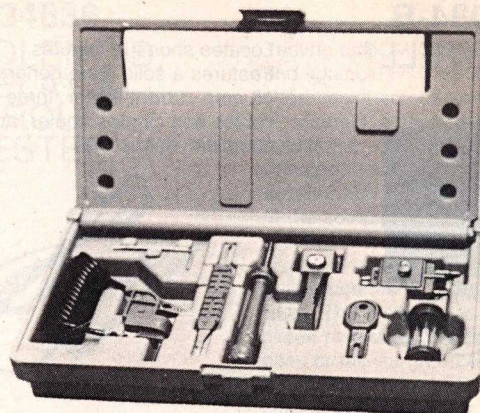


GENERAL DIAGNOSTIC, WIRING HARNESS, ACCESSORIES (CONTINUED)

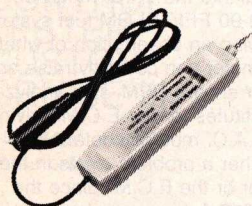
J 36400 COMPUTEST TOOL SET

Computest Tools will bring your technicians confidently into the age of solid-state electronics. No longer should highly sophisticated computer systems be damaged by untrained technicians using test lights or inexpensive multimeters.

Every time, on every model car, Computest Tools will quickly retrieve computer trouble codes or circuit data. This set can be purchased as individual tools or as a complete set. Individual tools are featured on page 149.



J 34636 SOLENOID, RELAY & CIRCUIT TESTER



J 34636 allows the technician to accurately check all relays and solenoids before connecting them to the new ECM. The tester measures the circuit resistance and indicates pass or fail via green or red LED's. An Amber LED indicates current polarity. Tester can be used as a non-powered continuity checker.

J 37864 GM TERMINAL KIT

This kit contains the Metri-pack and Weather-pack terminals and Weather-pack seals necessary to repair electrical connections at vehicle sensors and computers, including those on the RWAL brake system.

Using these terminals and the proper crimping tools assures electrical continuity integrity with no intermittent faults.

The terminals are color coded for ease of identification using the included terminal chart.

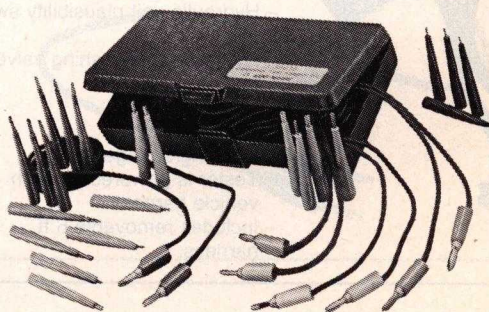


J 35689-A
TERMINAL REMOVER For use on vehicles with Micro-Pack connectors

J 35616 CONNECTOR TEST ADAPTER KIT

Designed specifically for GM but with application on many vehicles.

This adapter set contains an assortment of flexible connectors to adapt a multimeter or jumper cords to Packard Weather-Pack, Metri-Pack and Micro-Pack connectors. Includes 22 color coded flexible connectors and 4 color coded patch cords packaged in a convenient storage case. For CCC systems & other electronic components. A professional quality product that is a must for electronic diagnostic technicians. Patent 4708667.



CHASSIS ELECTRICAL

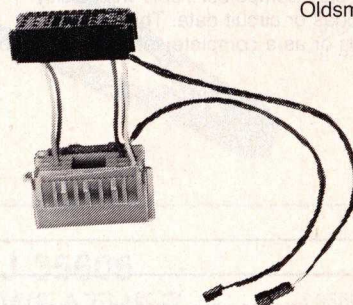
GENERAL DIAGNOSTIC, WIRING HARNESS, ACCESSORIES (CONTINUED)

BT 8034-B SHORTELL®



Locates shorts in minutes. Features a solid state generator, 15 amp current limiter, three test cables and clamps, meter, and complete instructions.

J 35628-90 PASS/VATS JUMPER CONNECTOR



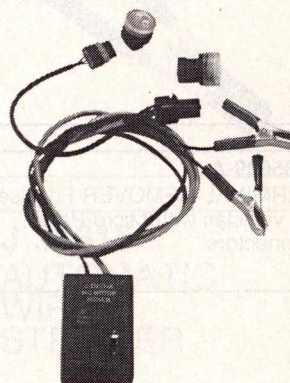
J 35628-90 is a new 48-way wiring harness that adapts to the J 35628-A VATS/PASS Interrogator for diagnosis of the PASS key system on 1990 Cadillac Deville/Fleetwood, 1990½ Buick Electra, and 1991 Oldsmobile 98/Regency.

J 35628-A VATS/PASS INTERROGATOR



Many GM models now feature VATS or PASS vehicle security systems. The Interrogator has 4 basic test functions for diagnosis of these systems: determine key codes for duplicate keys, determine the code of the vehicle if keys are not available, determine faults in the key switch or steering column, determine a fault downstream of the column. J 35628-A is an easy-to-use tester with complete operating instructions and includes the J 35628-90 Adapter Harness for the Cadillac Deville and Fleetwood systems. J 35628-A is featured on page 152.

J 37027-A IDLE AIR CONTROL MOTOR ANALYZER



J 37027-A inputs a stepper motor signal into the I.A.C. motor on 1982-90 PFI/TBI GM fuel systems allowing an observation of whether the motor can correctly raise and lower engine RPM. The analyzer substitutes for the E.C.M. driving the I.A.C. motor to determine whether a problem exists in the motor or the E.C.M. Since the J 37027-A can control engine idle speed, it is a useful aid for: ignition timing checks, cylinder balance checks, and injector cleaning. J 37027-A also includes the J 37027-3 PFI and TBI Idle Air Control System Check Lights which provide a quick, easy, and accurate means of checking the E.C.M. signal that provides commands to the idle air control motor for setting proper engine idle speed.

J 36210 ANTI-LOCK BRAKE SYSTEM TESTER



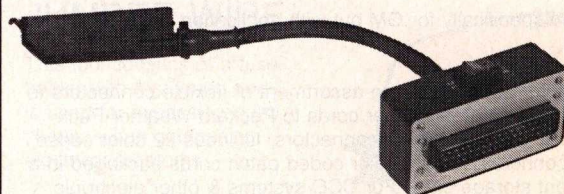
The J 36210 ABS Tester is a hand-held diagnostic tool for the Bosch II/III anti-lock brake system on the Cadillac Allante. When connected to the ABS Electronic Brake Control Module Harness the device will perform the following tests:

- Wheel speed sensor signal test.
- Valve actuation test.
- Hydraulic unit plausibility switch test.
- Hydraulic replenishing valve test.

FEATURES:

- Carrying/storage case.
- Tester is powered through vehicle harness.
- Includes removable 6 ft. harness.

J 36210-90 TRACTION CONTROL ADAPTER HARNESS



J 36210-90 adapts to the J 36210 ABS II/III Tester to diagnose the Allante Anti-Lock Brake System. Also when J 36210-90 is used with the J 35592 Pin Out Box and J 34029-A Digital Volt-Ohm Meter the Allante Traction Control System can be diagnosed.

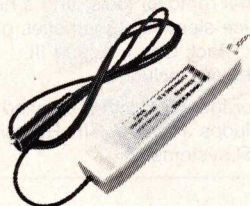
GENERAL DIAGNOSTIC, WIRING HARNESS, ACCESSORIES (CONTINUED)

J 36884 INFLATABLE RESTRAINT TESTER



The 1988 Oldsmobile Delta 88 can be equipped with a driver's side Supplemental Inflatable Restraint System (air bag). J 36884 is required when diagnosing this system once the system's warning lamp is activated. This tester has 3 harnesses for connecting to the restraint control center and the test connector plus battery leads to obtain power from the vehicle battery. A numbered 18-position rotary switch correlates with a GM service procedure found in the service manual. This is the only GM approved procedure for diagnosing this new system.

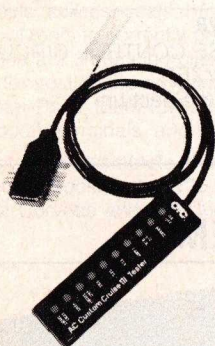
J 34636 SOLENOID, RELAY & CIRCUIT TESTER



Testing of ECM controlled relays and solenoids is very important. A short circuit across any one relay or solenoid, causing low or no resistance, will permanently damage the ECM quad driver circuitry and require replacement of the complete ECM. J 34636 allows the technician to accurately check all relays and solenoids before connecting them to the new ECM. The tester measures the circuit resistance and indicates pass or fail via green or red LED's. An amber LED indicates current polarity. Tester can be used as a non-powered continuity checker.

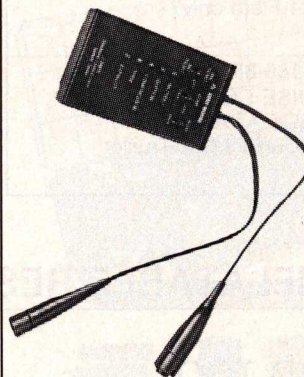
J 34185-B CRUISE CONTROL TESTER CUSTOM CRUISE III

(Non ECM controlled cruise only)



The J 34185-B is a valuable test unit for technicians who want to quickly diagnose the electronic cruise control system. The tester troubleshoots and checks the system in minutes, eliminating time consuming diagnosis with tree charts and pin-to-pin voltage/resistance testing. The tester easily connects in the Custom Cruise III system's wiring harness to test and verify all switches, sensors, wiring and function modes for proper operation. Individual LED's will detect any faulty components. J 34185-B has been approved by A/C Spark Plug Division, General Motors Corporation - the designer and manufacturers of the Cruise Control System. Complete instructions are provided. See J 36128 for Sprint & Spectrum.

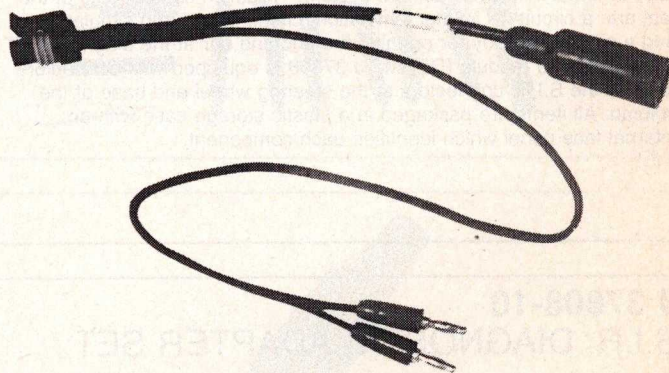
J 34825 ELECTRONIC LEVEL CONTROL TESTER



The J 34825 is a valuable test unit for technicians who want to quickly diagnose the electronic level control system on 1978-current General Motors vehicles (except manual height control valve systems). The tester troubleshoots and checks the system quickly eliminating time consuming diagnosis with tree charts and pin-to-pin voltage/resistance testing. The J 34825 easily connects to the system at the height sensor. The four LED's and three switches on the tester face panel allow the system to be manually cycled and monitored. A bench test of the height sensor can also be performed with the included 12 volt battery leads. Instructions are attached to the tester.

J 38490 TPS ADAPTER HARNESS

J 38490 TPS Adapter Harness is connected between the TPS and the vehicle harness to read the ECM voltage values for proper service of the TPS on the 1990 Cadillac C-Car. Use with J 34029-A Digital Volt-Ohm Meter.



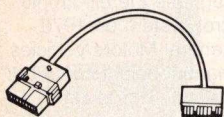
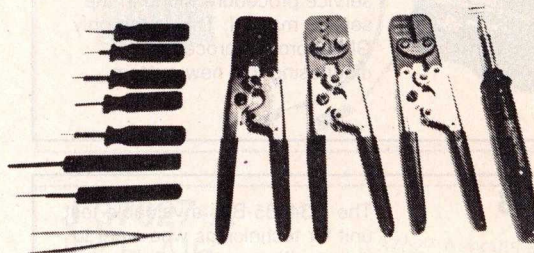
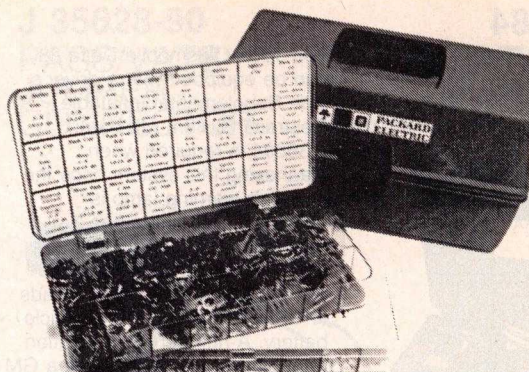
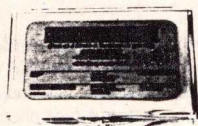
CHASSIS ELECTRICAL

GENERAL DIAGNOSTIC, WIRING HARNESS, ACCESSORIES (CONTINUED)

J 38125-A TERMINAL REPAIR KIT

J 38125-A is a Packard Electric designed kit which includes the terminals, splices, seals, harness pigtails, crimp tools, and terminal removal tools to correctly perform service repairs on GM vehicles. Included are 3 crimping pliers, 7 terminal removal tools, and a heat torch for sealing the environmental splice sleeves. 48 varieties of Weather-Pack, Metri-Pack, Micro-Pack, Pack Con I, II, and III, edgeboard terminals, and splice sleeves are included.

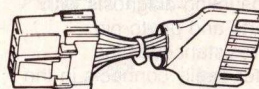
The kit comes complete in a plastic storage case with a detailed instruction booklet. J 38125-A also includes J 38540, SIR Repair Kit, for Corvette and GM Corporate SIR systems.



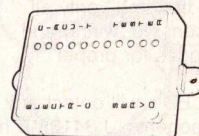
J 34185-10
CRUISE CONTROL TESTER
ADAPTER
(1984 Fiero only)



J 34185-88
CRUISE CONTROL QUICK
CHECK ADAPTER
87 - Current C/K Trucks



J 34185-89
CRUISE CONTROL TESTER
ADAPTER
L & W Cars



J 36128
CRUISE CONTROL CIRCUIT
ANALYZER
Sprint & Spectrum

SUPPLEMENTAL INFLATABLE RESTRAINT (S.I.R.) SYSTEMS

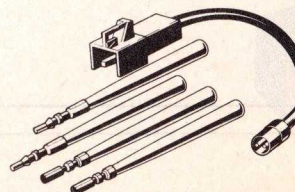
J 37808 S.I.R. COLUMN LOAD TOOL

J 37808 is used to simulate the electrical characteristics of the supplemental inflatable restraint system. The main components of the tool are: a circuit for inflator simulation, circuit for column simulation, and a connector body for opening the shorting bar at the diagnostic energy reserve module (DERM). J 37808 is equipped with connectors to mate the S.I.R. connectors at the steering wheel and base of the column. All items are packaged in a plastic storage case with an internal face panel which identifies each component.



J 37808-10 S.I.R. DIAGNOSTIC ADAPTER SET

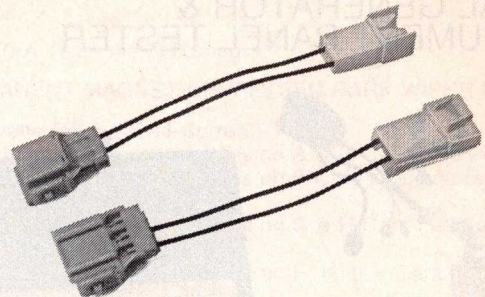
J 37808-10 (consists of J 37808-4 and J 37808-5) performs 2 separate functions for S.I.R. diagnosis on the Corvette. J 37808-4 consists of 2 male and 2 female probes for use with the J 34029-A High Impedance Digital Multimeter when testing front discriminating S.I.R. sensors. J 37808-5 is a wire harness which adapts the J 37808 S.I.R. Load Tool to the Corvette steering column.



SUPPLEMENTAL INFLATABLE RESTRAINT (S.I.R.) SYSTEMS (CONTINUED)

J 37808-50 S.I.R. DIAGNOSTIC ADAPTER SET

J 37808-50 includes 2 adapters to allow connection of the J 37808 S.I.R. Column Load Tool to the Geo Storm at the steering wheel or at the base of the steering column. Through the process of elimination the fault area can be identified.



J 38540 S.I.R. TERMINAL REPAIR ADAPTER KIT

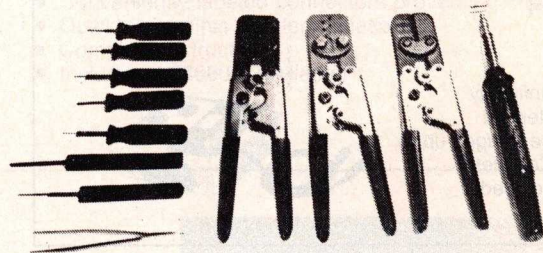
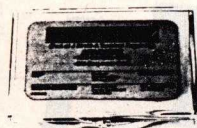
This kit upgrades J 38125 to a J 38125-A Terminal Repair Kit (including S.I.R.). The kit consists of connector repair pigtails for both the GM Corporate and Corvette S.I.R. systems, environmentally sealed S.I.R. terminals, yellow tape for identifying S.I.R. repaired areas, and complete illustrated instructions.



J 38125-A TERMINAL REPAIR KIT

J 38125-A is a Packard Electric designed kit which includes the terminals, splices, seals, harness pigtails, crimp tools, and terminal removal tools to correctly perform service repairs on GM vehicles. Included are 3 crimping pliers, 7 terminal removal tools, and a heat torch for sealing the environmental splice sleeves. 48 varieties of Weather-Pack, Metri-Pack, Micro-Pack, Pack Con I, II, and III, edgeboard terminals, and splice sleeves are included.

The kit comes complete in a plastic storage case with a detailed instruction booklet. J 38125-A also includes J 38540, SIR Repair Kit, for Corvette and GM Corporate SIR systems.



J 38597 T27 TAMPER RESISTANT TORX BIT

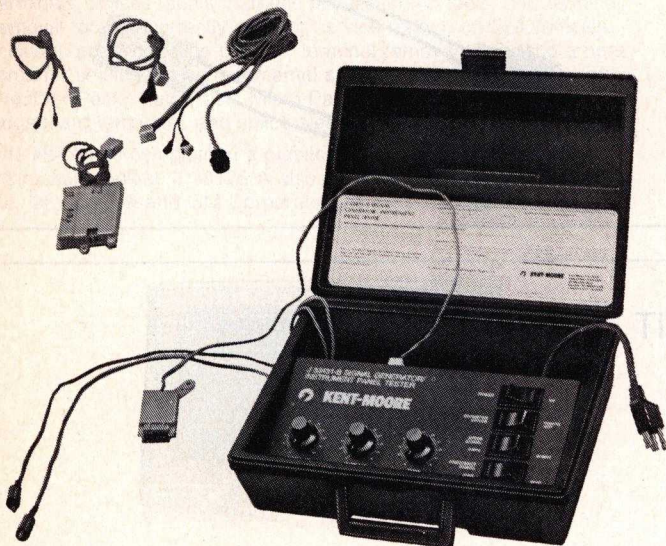
Some components of the 1990 E, K, and V car S.I.R. systems are retained by a T27 tamper resistant torx screw. J 38597 is needed to remove and replace these components.



CHASSIS ELECTRICAL

INSTRUMENT PANEL & GAUGES

J 33431-B SIGNAL GENERATOR & INSTRUMENT PANEL TESTER



The J 33431-B Signal Generator and Instrument Panel Tester has application to all General Motors vehicles with electronic instrument panels or Custom Cruise III Systems. Generates 30hz and 60hz signals to check accuracy and function of speedometer, tachometer, and all fuel economy displays. Variable resistance connectors will substitute sending units to check gauge or display.

- Oil Pressure
- Oil Temperature
- Coolant Temperature
- Fuel Level

Speedometer signal input can be used to diagnose all functions of the electronic cruise control systems.

Harnesses Included

- J 33431-4 PM Generator Speed Signal Harness
- J 33431-7 Buffer Amplifier Harness Connector (Green)

Accessory Harnesses

- J 33431-3 Odometer Motor Test Harness
- J 33431-8 Buffer Amplifier Harness Connector (Yellow)
- J 33431-9 Speedometer Edgeboard Connector ("C" Car Quartz)
- J 33431-10 Universal Signal Connector
- J 33431-30 Instrument Panel Tester Control Harness (Camaro Berlinetta)

This control harness will plug into the electronic instrument cluster on the Camaro Berlinetta. Frequency and resistance signals can be input to the cluster for complete diagnosis of:

- Speedometer
- Tachometer
- Turn Signals
- Oil Pressure
- Fuel Level
- Coolant Temperature

Instructions are included.

J 24538-B FUEL & TEMPERATURE GAUGE TESTER

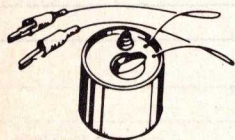
(Universal)

J 24538-B is infinitely adjustable to test all resistance type gauges up to 2050 ohms. Complete instructions included.



J 34914 CRT MEMBRANE SWITCH TESTER

This unit is used to isolate faults in the CRT, a touch sensitive TV screen which is a multifunction driver information center, standard on the Buick Riviera. By substituting this tester for the CRT controller, either at the CRT or at the wiring harness connector, a fault can be pinpointed in the CRT picture tube, membrane switch circuitry, or wiring harness.



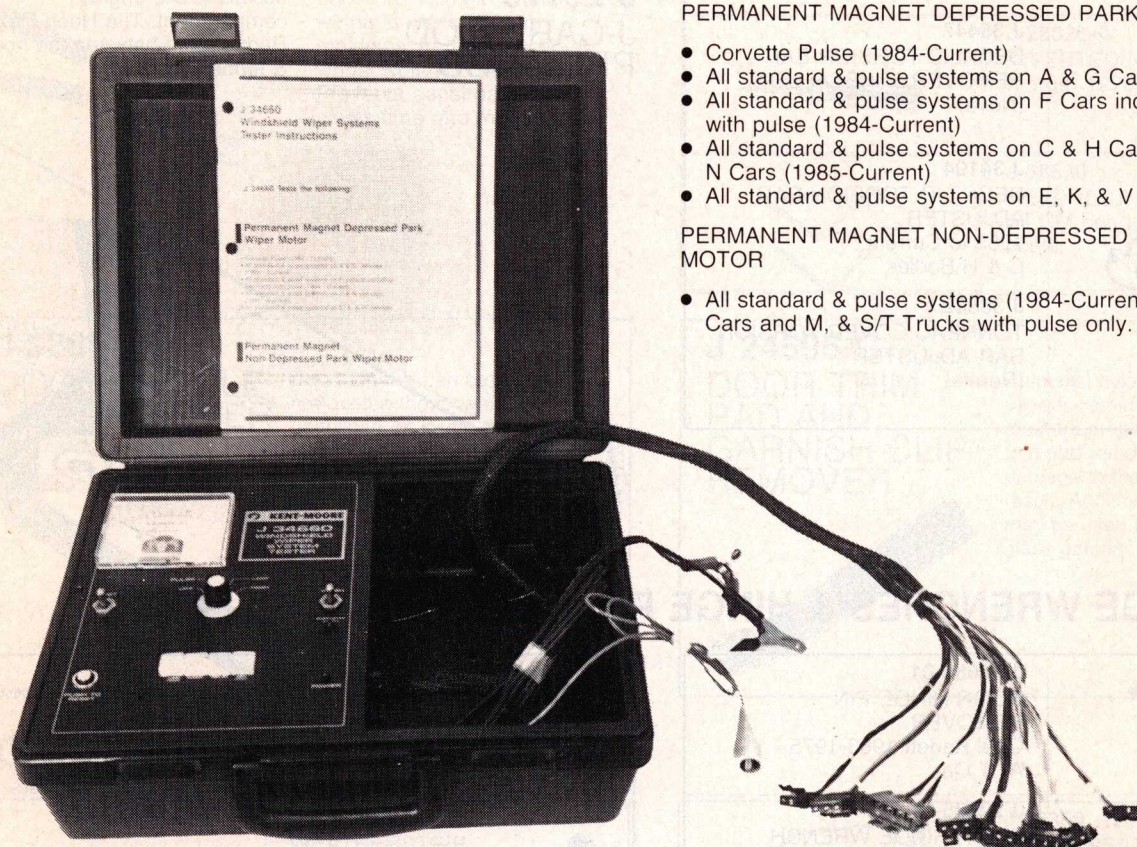
J 24156
FUEL GAUGE TESTER



J 33885
INSTRUMENT PANEL BULB
REMOVER & INSTALLER
(Quartz halogen bulbs)

WIPER SYSTEM

J 34660-A WINDSHIELD WIPER SYSTEMS TESTER



This easy to use windshield wiper motor tester has been developed to pinpoint exact problem locations on GM wiper systems.

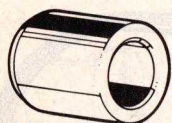
J 34660-A Tests the Following:

PERMANENT MAGNET DEPRESSED PARK WIPER MOTOR

- Corvette Pulse (1984-Current)
- All standard & pulse systems on A & G Cars (1984-Current)
- All standard & pulse systems on F Cars including Berlinetta with pulse (1984-Current)
- All standard & pulse systems on C & H Cars (1985-Current), & N Cars (1985-Current)
- All standard & pulse systems on E, K, & V Cars (1986-Current)

PERMANENT MAGNET NON-DEPRESSED PARK WIPER MOTOR

- All standard & pulse systems (1984-Current) including, J & P Cars and M, & S/T Trucks with pulse only.



J 22888-90
WIPER ARM PULLER
ADAPTER U-VAN

USE WITH J 22888-20 PULLER
J 22888-35 LEGS

J 34660-A features:

- Permanent Magnet Motor Application (Depressed Park and Non-Depressed Park)
- Has both on-car and off-car test capabilities.
- Lightweight, compact, and portable.
- Conveniently labeled connectors preventing improper hook up.
- Quickly pinpoints problem location.
- Complete instructions.
- Includes J 34660-87 Adapter.

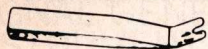


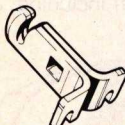
J 8966 WINDSHIELD WIPER ARM REMOVER & INSTALLER

This tool grips the wiper arm to retain the spring for ease of installation or removal of the assembly.



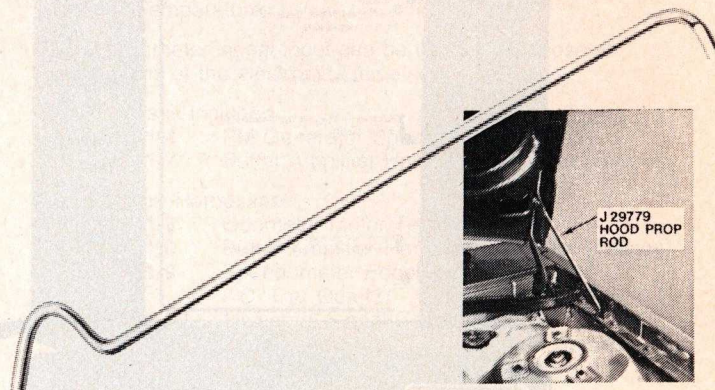
BODY

DECKLID, TAILGATE & HOOD

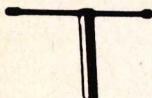

	J 21104-B UNIVERSAL WEATHERSTRIP REMOVER
	J 35447 DECKLID TORSION BAR REMOVER & INSTALLER (Nova)
	J 34194 DECK LID TORSION BAR ADJUSTER 1985 to Current C & H Bodies
	J 38602 TONNEAU COVER TORSION BAR ADJUSTER (Reatta)

J 29058-A X-CAR HOOD PROP ROD J 29779 J-CAR HOOD PROP ROD

These tools are used to support the hood in a near vertical position allowing easy access to the engine compartment. The Hood Prop Rods mount between the hood & fender.

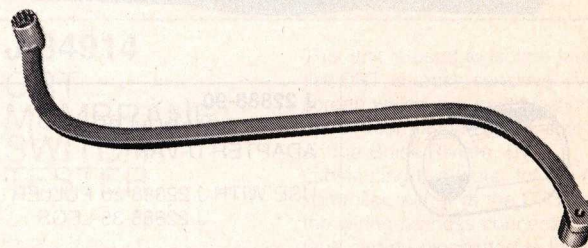


DOOR-HINGE WRENCHES & HINGE PIN REMOVERS

	J 21688-01 DOOR HINGE PIN REMOVER Opel Kadett 1963-1975 All T Car
	J 22585-01 DOOR HINGE WRENCH (9/16") Chev & GMC Truck 1968 to Current

J 28500 DOOR HINGE WRENCH (11mm)

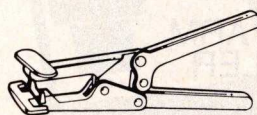
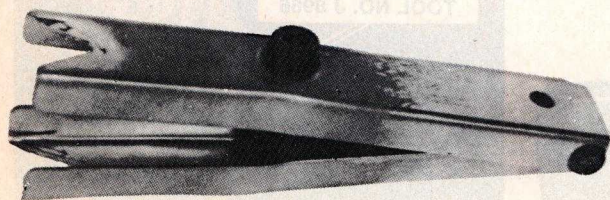
This 11mm double-ended 12 point wrench has the required configuration to easily rotate the door hinge retaining bolts on all 1978 to Current passenger cars utilizing 11mm Hinge Bolts.



DOOR-HINGE SPRING COMPRESSORS

J 36604 DOOR HINGE SPRING COMPRESSOR

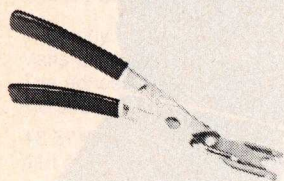
J 36604 supersedes the J 28625-A spring compressor, working on all applications. 1980 to current except J-Car.



J 23497
DOOR HINGE SPRING
COMPRESSOR
X-Car 1971 to 1979

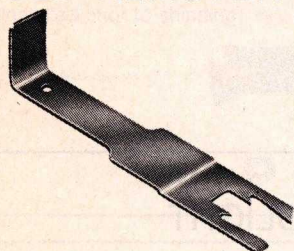
DOOR - INTERIOR PANEL

J 36796 "CLIP ZIP" CLIP REMOVAL TOOL

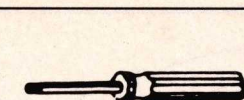


A great new tool for that frustrating job of removing plastic body clips. Used on door trim, hook insulation clips, wiring stays, body trim moldings, bumper covers & wheel well mud shields. Prevents panel damage & saves time and money.

J 9886-01 DOOR HANDLE CLIP REMOVER



Door handles can be easily removed without damaging the upholstery or losing the spring clips when using the J 9886-01 Door Handle Clip Remover. The spring clip is retained in the door handle eliminating the danger of flying springs and allowing for easy reinstallation of the handle.



J 23554
INVERTED NUT DRIVER
(Small) 1971 to Current



J 28626-A
INVERTED NUT DRIVER
(Large) 1978 to Current



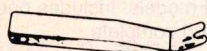
J 38530
HEADREST REMOVAL TOOL
All GM headrests with twin posts.

J 24595-C DOOR TRIM PAD AND GARNISH CLIP REMOVER

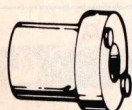


A special nylon retaining clip is used to retain the trim pad that must be properly engaged during trim pad removal, otherwise damage to the trim pad may result. Additionally, J 24595-C may be used to remove the rear glass garnish molding clip.

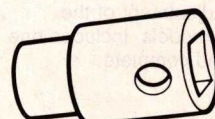
DOOR - GENERAL



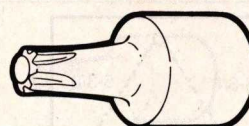
J 21104-B
WEATHERSTRIP
REMOVER All GM



J 22055
DOOR AND QUARTER
WINDOW ROLLER NUT
SOCKET
All 1985 - Current



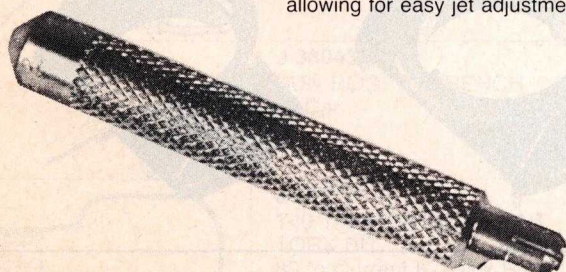
J 25359 -12
W-CAR SEAT MOUNT BOLT
TORX SOCKET #10
1989 - Current



J 29843-9
DOOR LOCK STRIKER
& SEAT BELT TORX
WRENCH #47 Torx
1971 to Current

HEADLIGHT

J 36862 HEADLAMP WASHER JET ADJUSTER



The Cadillac Allante is equipped with headlamp washer jets. The metal tangs on J 36862 snap into the jets unlocking them and thus allowing for easy jet adjustment.

BODY

HEADLIGHT AIMING

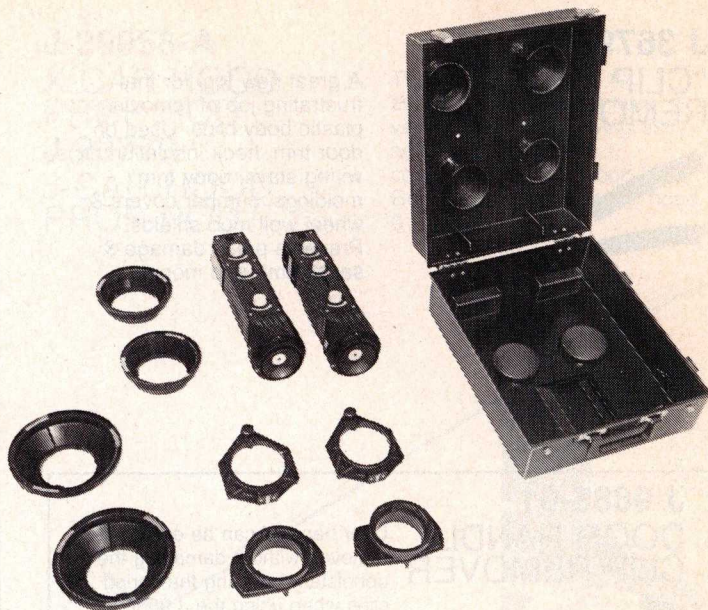
J 25300-B HEADLIGHT AIMER

(Includes J 25300-202 & 203 Adapters)

Proper mechanical aiming for round and rectangular headlights.

Features

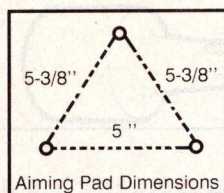
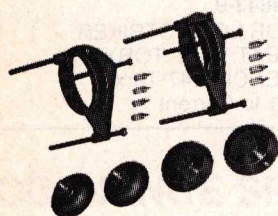
- **PUSH BUTTON VACUUM RELEASE** - For quick and easy removal of the aimer without disturbing adjustment.
- **OPTICAL CONTRAST BUBBLE** - Improves the bubble visibility at low light levels.
- **GRAVITY CAM FOLLOWERS** - Completely eliminates backlash and gives more accurate dial readings.
- **PLANETARY GEARS** - Gives four to one vernier type dial movement for accurate checking of headlight aim.
- **OFFSET DIAL** - Eliminates the need for a screwdriver in floor slope compensation.



J 25300-202 COMPOSITE HEADLIGHT AIMER ADAPTER (LARGE PAD PATTERN)

Included with J 25300-B

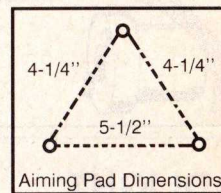
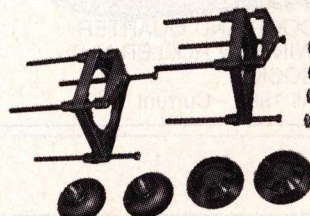
This adapter set is used in conjunction with J 25300-B Headlight Aimer to allow inspection and adjustment of the Composite Headlights used on many GM models. Includes one set of adapters, vacuum cup extenders and complete instructions.



J 25300-203 COMPOSITE HEADLIGHT AIMER ADAPTER (SMALL PAD PATTERN)

Included with J 25300-B

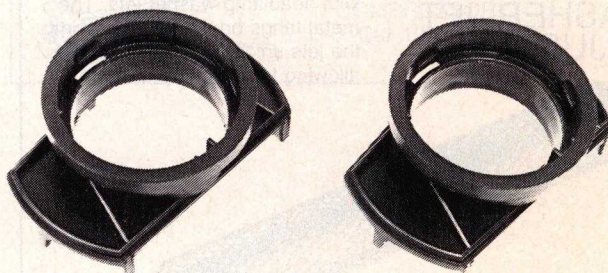
This adapter set is used in conjunction with J 25300-B Headlight Aimer to allow inspection and adjustment of the Composite Headlights used on many GM models. Includes one set of adapters, vacuum cup extenders and complete instructions.



J 25300-204 92MM × 150MM HEADLIGHT AIMER ADAPTER

NOT Included with J 25300-B

This adapter set is used in conjunction with the previously released J 25300-B Headlight Aimer to allow inspection and adjustment of the new smaller 92mm × 150mm Headlights used on many GM models.



EXTERIOR BODY PANELS

A8 37479-1 BODY PANEL ADHESIVE APPLICATOR (APV U-VAN)

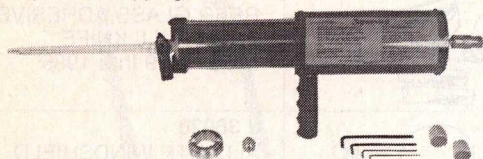
The body panels on the Lumina Transport and Silloutte APV Vans are bonded to the spaceframe with a special adhesive. The adhesive serves as a moisture seal and also contributes to the structural integrity of the vehicle.

A8 37479-1 Dispensing Gun is required to apply this two (2) part adhesive when replacing body panels or when patching/filling is required. The gun is used with shop air and includes two (2) sets of internal plungers for different mix ratios. NOTE: The two-component mixing material cartridges are available through GM parts only.

Includes:

- (1) 3.5:1 Ratio High Pressure Dispenser
- * (1) 1:1 Ratio Pneumatic Gun-Outer Plunger
- * (1) 1:1 Ratio Pneumatic Gun-Inner Plunger
- (1) 3.5:1 Ratio Pneumatic Gun-Outer Plunger
- (1) 3.5:1 Ratio Pneumatic Gun-Inner Plunger

*Installed prior to shipping



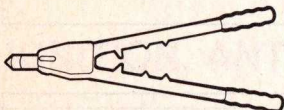
	J 36346 PLASTIC FASCIA RETAINER REMOVER 1986 to Current E & K-Cars
	J 36877 COMFORT RELEASE RETAINING NUT SOCKET H-Car
	J 38337 TR1 CON SPRAY GUN For application of impact resistant protectant spray on 88 to Current C/K Truck

J 8943-01 SPOT WELD CUTTING TOOL



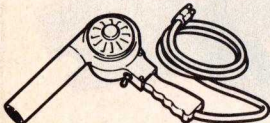
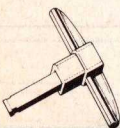

This double-ended 5/8" diameter cutter can easily remove spot welds on all body panels. (Includes three extra blades)



J 8967
REPLACEMENT BLADES
FOR J 8943-01 (Set of six)

	J 34940 HEAVY DUTY RIVET GUN
--	--

ROOF & TOP

	J 2772-C HEADLINER INSTALLER All GM
	J 24416-A SIDE GARNISH MOLDING REMOVER All GM
	J 25070 HEATGUN (500° to 750°F) Universal
	J 38043 SUN ROOF T-WRENCH W-Car
	J 38218 T40 TAMPER RESISTANT TORX BIT 89 to Current K-Truck Roof Retaining Bolts

	J 38219 T50 TAMPER RESISTANT TORX BIT 89 to Current K-Truck Roof Retaining Bolts
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J 34887-A ROOF PANEL ADJUSTING WRENCH

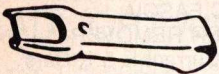

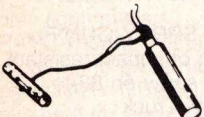
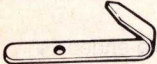
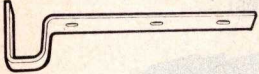
(1984 to 1986
Corvette)

When a new Roof Panel is installed on the Corvette, the locating pins on the panels must be lined up with the windshield mounting holes before tightening. This wrench will fit between the panel and windshield mount to tighten the locating pins in the correct position. (Instructions included)



BODY


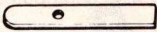
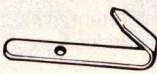
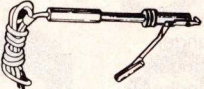

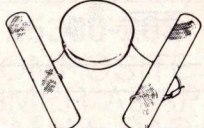
GLASS-SEALANT

	J 21549-1 HANDLE (Use with J 21549-4)
	J 21549-4 THIOKOL ADHESIVE CUTTING EDGE (Use with J 21549-1)
	J 24402-A GLASS SEALANT REMOVER (Cold Knife) (Replacement teflon blade J 24402-5)
	J 24402-6 WINDSHIELD REMOVER BLADE 1986 Blazer & Jimmy with Sliding Glass (Use with J 24402-A)
	J 24402-15 WINDSHIELD REMOVER BLADE 1986 to Current E-Car (Use with J 24402-A)

J 36863 GLASS REMOVAL KIT

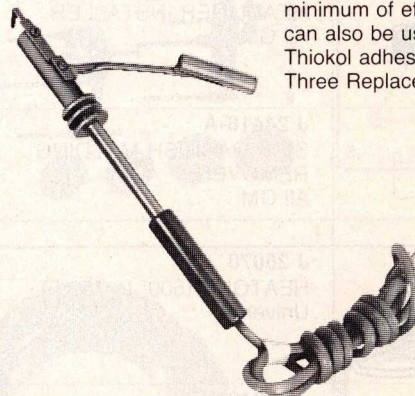
This kit is used to remove windshields on the Cadillac Allante without damaging interior trim.



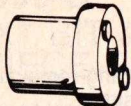
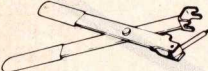
	J 24811-A STATIONARY GLASS SEALANT DISPENSING GUN/Urethane
	J 24851 HOT KNIFE BLADE (Square nose) Use with J 24709-01
	J 24852 HOT KNIFE BLADE (Plow Type) Use with J 24709-01
	J 24899-01 URETHANE GLASS SEALANT REMOVER Same as J 24709-01 except 220 volt 50 cycle
	J 28628 REAR GLASS ADHESIVE PUSH-PULL KNIFE E-Car 1979 thru 1985
	J 36020 ALLANTE WINDSHIELD REMOVER 1987 to Current

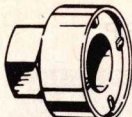
J 24709-01 URETHANE GLASS SEALANT REMOVER

The J 24709-01 incorporates a knife blade tip which is designed to reach an operating temperature of 700°F. This high operating temperature permits the technician to pull the hot knife through urethane adhesive with a minimum of effort. The J 24709-01 can also be used on butyl and Thiokol adhesive. (J 24709-4 Three Replacement Blades)



GLASS-GENERAL

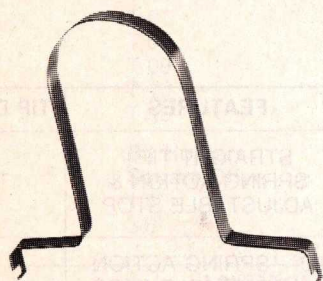
	J 22055 DOOR & QUARTER WINDOW ROLLER NUT SOCKET (All 1965 to Current)
	J 34946 WINDOW ROLL PIN REMOVER (M-Van)


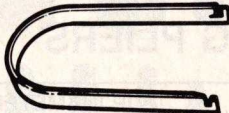
	J 36402 WINDOW BUSHING SPANNER WRENCH 1987 to Current Allante
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INSTRUMENT PANEL

J 24612-01 INSTRUMENT PANEL LOUVRE REMOVER

The air conditioning outlet grills can easily be removed by compressing the tabs with this tool. (Cadillac 1974 thru 1979).



	J 22901-01 GLOVE BOX NUT WRENCH (All 1968 to Current)
	J 29002 INSTRUMENT PANEL LOUVRE REMOVER (Cadillac 1979 to Current)

IGNITION, ANTENNA & ACCESSORIES

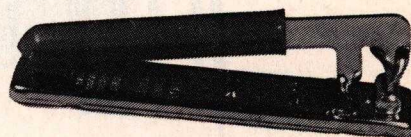
J 29669-B KEY CLIPPER  	Key identification tabs can easily be removed without removing the keys from the ring when using J 29669-B. Made from chrome-plated spring steel. (All except vinyl covered)
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J 38536 ANTENNA BEZEL SOCKET (All 1980 to Current) 	J 38536 is designed to engage the bezel slots of the bezel nut when removing and installing the antenna on 1980 to current vehicles. J 38536 can be used with the antenna up or down.
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	J 38597 T27 TAMPER RESISTANT TORX BIT WITH HOLDER (S.I.R. Sensor mounting screws)
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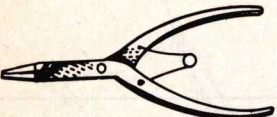
J 36472 DESK TOP KEY TAB REMOVER

Quickly punches out the code number slug on all 1970 and newer GM auto and truck keys. This tool has been updated to work on GM keys with plastic sleeves. Handle is heat-treated spring steel. Base is reinforced formed steel with rubber pads to prevent marring bench top or desk.



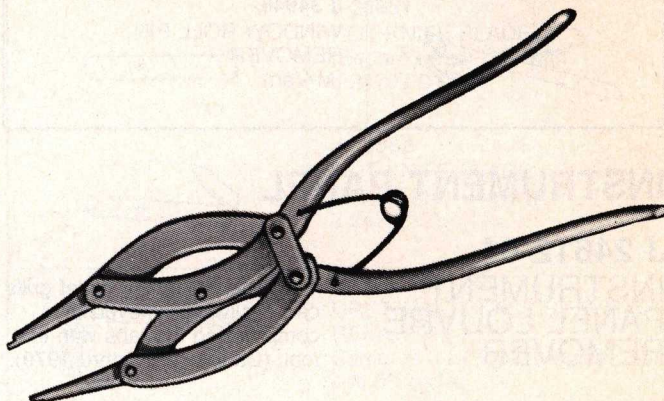
GENERAL HAND TOOLS

SNAP & RETAINING RING PLIERS

	J 932 VACUUM GRIP
	J 5586-A MODIFIED VACUUM GRIP
	J 8039-A MODIFIED VACUUM GRIP

J 8059 SNAP RING PLIERS

These parallel opening jaw pliers make snap ring removal easy. Ideal for Automatic & Manual transmissions.



INTERNAL SNAP RING PLIERS

TOOL NO.	FEATURES	TIP DIAMETER
J 5403	STRAIGHT TIP	.038"
J 4245	STRAIGHT TIP	.070"
J 5207	STRAIGHT TIP	.090"

TOOL NO.	FEATURES	TIP DIAMETER
J 4646	STRAIGHT TIP - SPRING ACTION & ADJUSTABLE STOP	.090"
J 22380	90° - SPRING ACTION & ADJUSTABLE STOP	.150"

EXTERNAL SNAP RING PLIERS

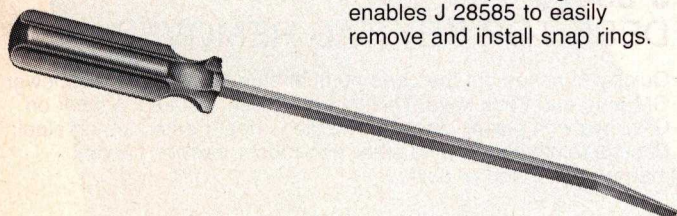
TOOL NO.	FEATURES	TIP DIAMETER
J 4880	STRAIGHT TIP	.038"
J 6083	STRAIGHT TIP	.070"



TOOL NO.	FEATURES	TIP DIAMETER
J 6435	STRAIGHT TIP	.115"

SNAP RING REMOVERS

J 28585 SNAP RING REMOVER

This tool is used to remove and install large snap rings on such components as transmissions. The length of the tool and tip configuration enables J 28585 to easily remove and install snap rings.



	J 29823 INTERNAL RETAINING RING REMOVER
	J 29836 UNIVERSAL SNAP RING REMOVER

TORX

J 25359-C

TORX® BIT AND SOCKET SET (20 PIECE SET) PLUS STORAGE BOX

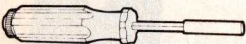
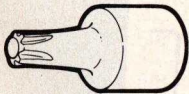
Consists of the following:

Part Number	Socket Size	Square Drive
J 25359-10	E6	3/8"
J 25359-11	E8	3/8"
J 25359-12	E10	3/8"
J 25359-20	E12	3/8"
J 25359-21	E14	1/2"
J 25359-22	E8	1/4"

Part Number	Bit Size	Hex Shank
J 25359-1	T 20H	1/4"
J 25359-2	T 25H	1/4"
J 25359-3	T 27H	1/4"
J 25359-4	T 30	1/4"
J 25359-5	T 40	5/16"
J 25359-6	T 45	5/16"
J 25359-7	T 50	5/16"
J 25359-15	T 07	1/4"
J 25359-16	T 08	1/4"
J 25359-17	T 09	1/4"
J 25359-18	T 10	1/4"
J 25359-19	T 15	1/4"

Part Number	Bit Holders Square Drive	Hex Shank
J 25359-8	1/4"	1/4"
J 25359-9	3/8"	5/16"



	J 25359-26 1/4" TORX® BIT SCREWDRIVER
	J 38219 Tamper Resistant TORX® Bits T40 Bit

	J 38219 Tamper Resistant TORX® Bits T50 Bit
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VA 70433

STANDARD HANDLE TORX® SCREWDRIVERS

This 5-piece set includes TORX® sizes T15, T20, T25, T27, T30. Each handle size is 1" x 3 3/8"; Blades are 4" overall length of 7 5/8".

Set comes in a hang-up box that can be used for storage.



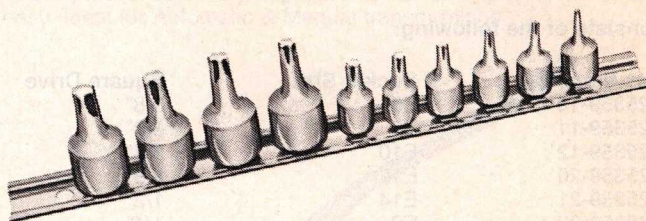
GENERAL HAND TOOLS

TORX (CONTINUED)

TORX® BIT SOCKETS (For Internal Drive Fasteners)

J 29843 TORX® SET

These attractive chromed bits fit most automotive applications. They can be used in many areas such as headlights, body, engine, transmissions, suspension, carburetor, door strikers, seat belt anchors and bumper mounts. The one piece design allows for quick use with a 1/4" or 3/8" square drive. Highlighting the set is the T47 which is the exact size for the GM door striker bolt. Fastened to the rail clip, they can be easily identified for use on a tool board or in your tool cabinet. (Includes sizes T10, T15, T20, T25, T27, T30, T40, T45, and T50.)



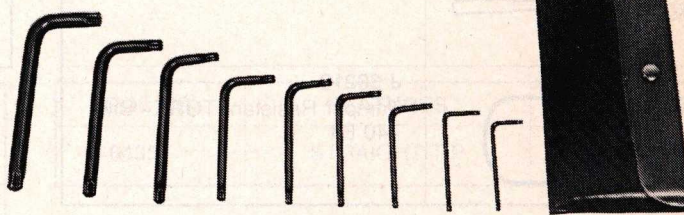
Individual Torx® Bit Sockets

Tool Number	Socket Size	Square Drive	Tool Number	Socket Size	Square Drive
J 29843-1	T10	1/4"	J 29843-7	T40	3/8"
J 29843-2	T15	1/4"	J 29843-8	T45	3/8"
J 29843-3	T20	1/4"	J 29843-9	T47	3/8"
J 29843-4	T25	1/4"	J 29843-10	T50	3/8"
J 29843-5	T27	1/4"	J 34161	T55	1/2"
J 29843-6	T30	1/4"	J 36721	T60	1/2"

TORX HEX KEY

J 33179 TORX® KEY WRENCH SET

This set includes 9 Torx 90° angle wrenches in the following sizes: T10, T15, T20, T25, T27, T30, T40, T45 and T50. Also included, is a plastic storage pouch.

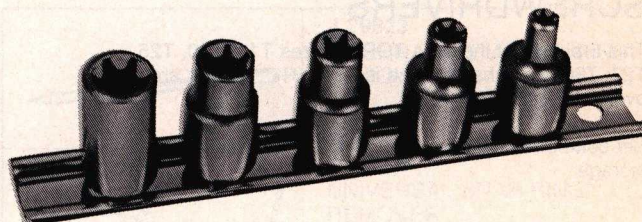


TORX SOCKETS

(For External Drive Fasteners)

J 29844 TORX® SOCKET SET

These attractive chromed sockets are placed on a convenient rail clip for easy storage and removal. The sockets facilitate the removal and installation of external Torx® head screws. They are used in many areas of the automobile such as, steering columns, brakes and suspensions.



Individual Sockets

Tool Number	Socket Size	Square Drive	Tool Number	Socket Size	Square Drive
J 25359-12	E10	3/8"	J 25359-10	E6	3/8"
J 25359-20	E12	3/8"	J 25359-22	E8	1/4"
J 25359-21	E14	1/2"	J 25359-11	E8	3/8"

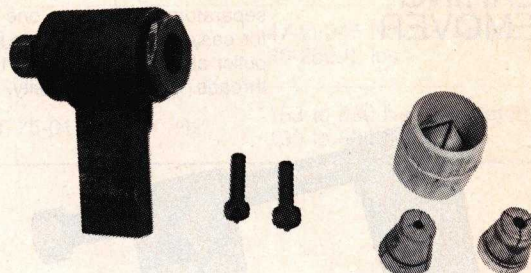
TUBE SERVICE TOOLS

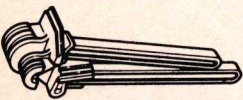
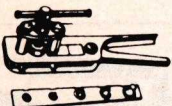
J 29803-A ISO FLARING KIT

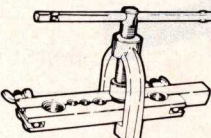

Many GM cars incorporate an International Standards Organization (ISO) design brake line flare. J 29803-A is required when flaring existing or new brake lines.

This kit has been designed to form ISO flares on both 4.75mm and 6mm brake lines.

J 29803-A includes complete instructions and a custom molded storage case.



	J 25310 TUBE BENDER 3/16", 1/4", 5/16" & 3/8"
	J 23530 FLARING TOOL 45° Single & double flare

	OF 7203 FLARING TOOL 45° Single & double flare 3/16" to 1/2" with .040" max wall thickness.
	OF 7205 TUBE SERVICE SET (INCH)

SLIDE HAMMERS

J 6125-1B	5/16"-18 THREAD WITH 3/8-16 ADAPTER
J 6125-B	5/16"-18 THREAD WITH 3/8-16 ADAPTER (Set of 2)
J 7108	5/8"-11 THREAD
J 2619-01	5/8"-18 THREAD WITH 1/2-13 ADAPTER

J 6471-02	5/1-18 THREAD WITH ADAPTERS 3/8-16, 3/8-24, 3/4-10, 3/4-16, 1-14, 1/2-13, 7/16-20, 9/16-18, 5/8-11, 7/8-14, 7/8-9, 1/2 PIPE & 1/4 PIPE
J 23907	1/2-13 THREAD WITH CLUTCH PILOT BEARING PULLER ADAPTER (Featured on page 156)

SLIDE HAMMER ADAPTERS

Tool No.	Female Thread	Male Thread
J 6258	3/4"-16	1/2"-13
J 6471-15	5/8"-18	1/4" PIPE
J 6471-2	5/8"-18	3/8"-16
J 6471-9	5/8"-18	7/16"-20
J 6471-8	5/8"-18	1/2"-13
J 6471-4	5/8"-18	1/2"-20

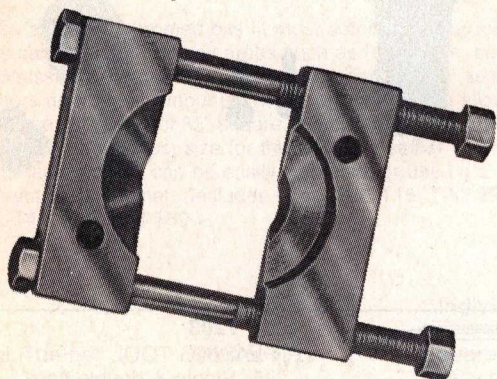
Tool No.	Female Thread	Male Thread
J 6471-14	5/8"-18	1/2 PIPE
J 6471-10	5/8"-18	9/16"-18
J 6471-6	5/8"-18	3/4"-16
J 6471-13	5/8"-18	7/8"-9
J 6471-12	5/8"-18	7/8"-14

GENERAL HAND TOOLS

SPLIT PLATE PULLERS

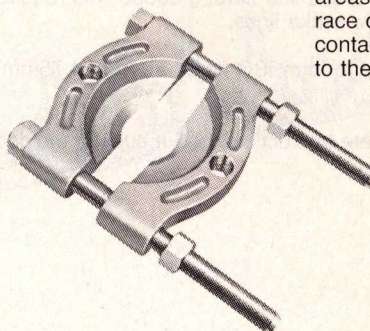
OF 2533 BEARING REMOVER

The knife edges of this bearing separators are flush on one side for easy pulling. Two holes for puller attachment have $\frac{3}{8}$ "-16 threads. 0 to $2\frac{1}{4}$ " Capacity.



J 22912-01 BEARING REMOVER

This is an adjustable bearing remover that has knife like edges that fit into very tight areas. In all cases, the inner race of the bearing must be contacted to prevent damage to the bearing.

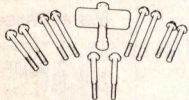

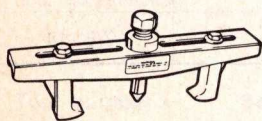


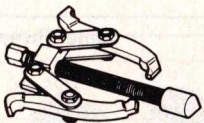
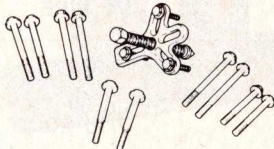
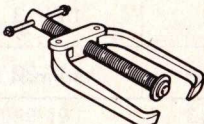
DRIVER HANDLES

TOOL NO.	DESCRIPTION	SIZE
J 7079-2	FOR NON-THREADED DRIVER HEADS WITH $\frac{1}{2}$ " ROUND FEMALE DRIVE	8" LONG $\frac{1}{2}$ " PILOT
J 8092	FOR THREADED DRIVER HEADS	9" LONG $\frac{3}{4}$ "-10 THREAD

TOOL NO.	DESCRIPTION	SIZE
J 8592	FOR THREADED DRIVER HEADS	12" LONG $\frac{3}{4}$ "-10 THREAD
J 21465-13	DRIVER HANDLE EXTENSION - THREADED BOTH ENDS (Male and Female Thread)	8 $\frac{1}{2}$ " LONG $\frac{3}{4}$ "-10

PULLERS

	J 1859-03 STEERING WHEEL PULLER (Includes 5 sets of side screws for GM vehicles)
	J 24319-01 UNIVERSAL STEERING LINKAGE PULLER
	J 8433 UNIVERSAL CROSS BAR PULLER (Used for A/C, Transmissions & many other components)

	J 22888-20 UNIVERSAL REVERSIBLE LEG PULLER (Bearings & Gears)
	OF 2513 UNIVERSAL HARMONIC BALANCER PULLER (Includes 4 sets of hardware)
	J 28509-A CRANKSHAFT SPROCKET REMOVER

GENERAL HAND TOOLS

ADJUSTABLE TORQUE WRENCHES RATCHET DRIVE

Tool #	Drive	Range (Dual Scale)
J 24405	3/8"	3 to 28 Newton Meters 30 to 250 in. lbs.
J 244061	3/8"	23 to 138 Newton Meters 15 to 100 ft. lbs.


Tool #	Drive	Range (Dual Scale)
J 24407	1/2"	47 to 345 Newton Meters 30-250 ft. lbs.
J 23775-01	3/4"	153 to 830 Newton Meters 100 to 600 ft. lbs.

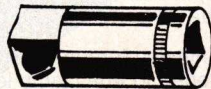
BEAM STYLE TORQUE WRENCHES

Tool #	Drive	Range (Dual Scale)
J 7754 -01	3/8"	0-3 Newton Meters 0-25 in. lbs.

Tool #	Drive	Range (Dual Scale)
J 5853-C	3/8"	0-68 Newton Meters 0-600 in. lbs.
J 1313-B	1/2"	0-250 Newton Meters 0-150 ft. lbs.

TORQUE WRENCH ADAPTERS

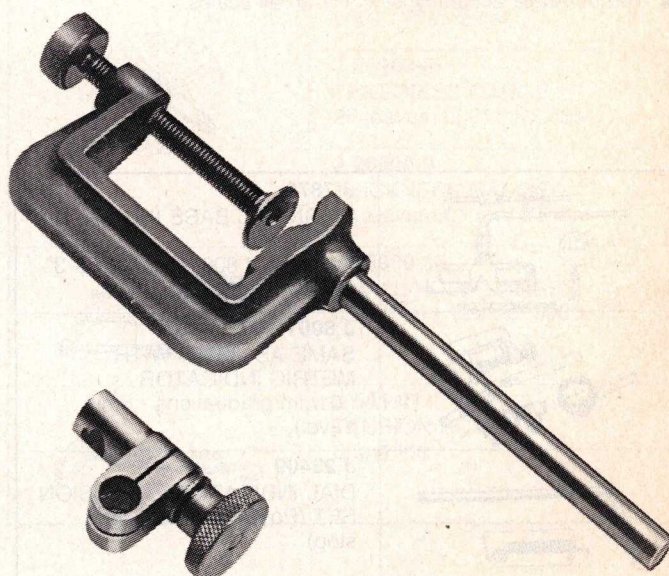
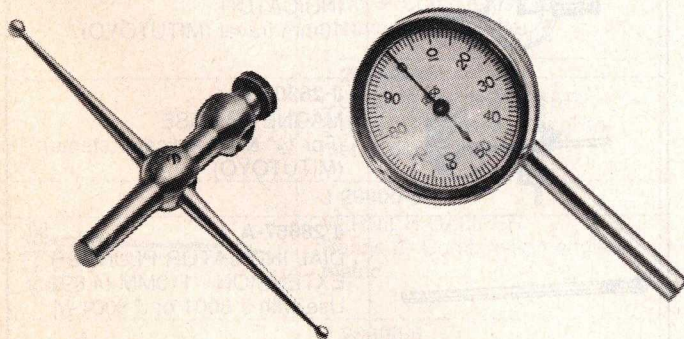
	J 8068 3/8" FEMALE TO 1/2" MALE
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	J 5583 1/2" FEMALE TO 3/4" MALE
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MEASURING TOOLS-DIAL INDICATORS & ACCESSORIES

J 8001 DIAL INDICATOR SET

In order to perform critical measurements, J 8001 and the attachments included are necessary for most jobs. The most common uses for this gauge are rear axle and transmission work. J 8001 features .001" increments and .230" travel. Set includes J 8001-1 Dial Indicator Clamp, J 8001-2 Dial Indicator Sleeve, J 8001-3 Dial Indicator and J 8001-4 Hole Attachment.



	J 4757 DIAL INDICATOR PLUNGER MICROMETER BALL ATTACHMENT
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	J 7057 DIAL INDICATOR PLUNGER EXTENSION (2 1/2" Long) Use with J 8001 or J 8001-M
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GENERAL HAND TOOLS

MEASURING TOOLS-DIAL INDICATORS & ACCESSORIES (CONTINUED)

J 36660 TORQUE/ANGLE METER

The torque wrench has been the standard for years for tightening bolts and nuts that clamp parts together. Torque is actually the force used to turn a fastener (bolt or nut) against friction (between threads and between fastener head and component surface). It is a fact that up to 90 percent of torque is used up by friction. The remaining 10 percent is used to clamp parts together. So, by using fastener torque tightening methods, clamping forces can vary significantly over a single cylinder head or other engine component.

Because new high tech products such as the Oldsmobile Quad Four Engine are designed with extremely close tolerances, it is not surprising that torque alone is no longer adequate for proper service procedures on this type of product.

Torque/angle measurement of fastener installations is a method of clamping parts together which insures that like fasteners will exert the same clamp force without deviation from one fastener to the next. Without proper clamping forces, distortion of cylinder bores and bearing bores may occur as well as leaking head gaskets.

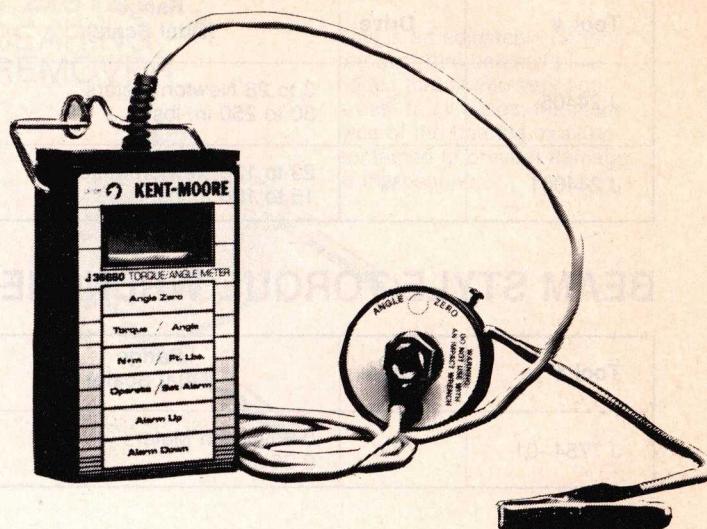
The torque/angle method first specifies a low threshold torque on the fastener to get components in close touch. Torque is least affected by fastener friction at these low values.

The fasteners are then turned through a specified angle. The clamping force of each fastener will then be consistent.

J 36660 is a precision, microprocessor controlled torque/angle meter which will insure fasteners are tightened to true clamp load specifications consistently and easily.

SPECIFICATIONS:

- 0 to 200 ft. lb. and 0 to 266 N•m torque range
- 0 degrees to 360 degrees angle range
- Three digit, LCD type readout
- 25 hour battery life (9 volt alkaline)
- Torque/Angle accuracy is $\pm 1\%$ on all scales



FEATURES:

- Replaces the torque wrench
- Can be used as a torque wrench alone
- Never needs calibrating
- Microprocessor controlled
- State-of-the-art electronics
- Touch pad function controls
- Manufacturer's Torque/Angle specifications can be preset in memory
- Audible alarm to signal operator when fastener tightening reaches manufacturer's specification
- High impact ABS plastic instrument housing stands up to tough shop environment
- J 36660 accommodates 1/2" square drive or 1" hex wrench
- Custom liquid crystal display readout with operational modes and units displayed for ease of operation
- Torque can be displayed in either ft. lbs. or N•m
- Automatic shut-off
- Overload alarm when 200 ft. lbs. of torque is reached
- Storage case
- Complete, easy-to-read operating instructions
- Handy Service Hook

	J 7872 MAGNETIC BASE INDICATOR SET (Includes J 8001 indicator & 3" plunger extension)
	J 8001-M SAME AS J 8001 WITH METRIC INDICATOR (.01mm graduations - 5mm travel)
	J 23409 DIAL INDICATOR EXTENSION SET (Post & indicator back stop)
	J 23672 DIAL INDICATOR PLUNGER RADIAL RUN OUT ADAPTER (Use with J 8001 or J 8001-M)

	J 26900-12 ADJUSTABLE METRIC DIAL INDICATOR 10mm travel (MITUTOYO)
	J 26900-13 MAGNETIC BASE (For 1/4" & 3/8" indicator stems) (MITUTOYO)
	J 28667-A DIAL INDICATOR PLUNGER EXTENSION - 110MM (4.89") Use with J 8001 or J 8001-M

MEASURING TOOLS

J 26900-1

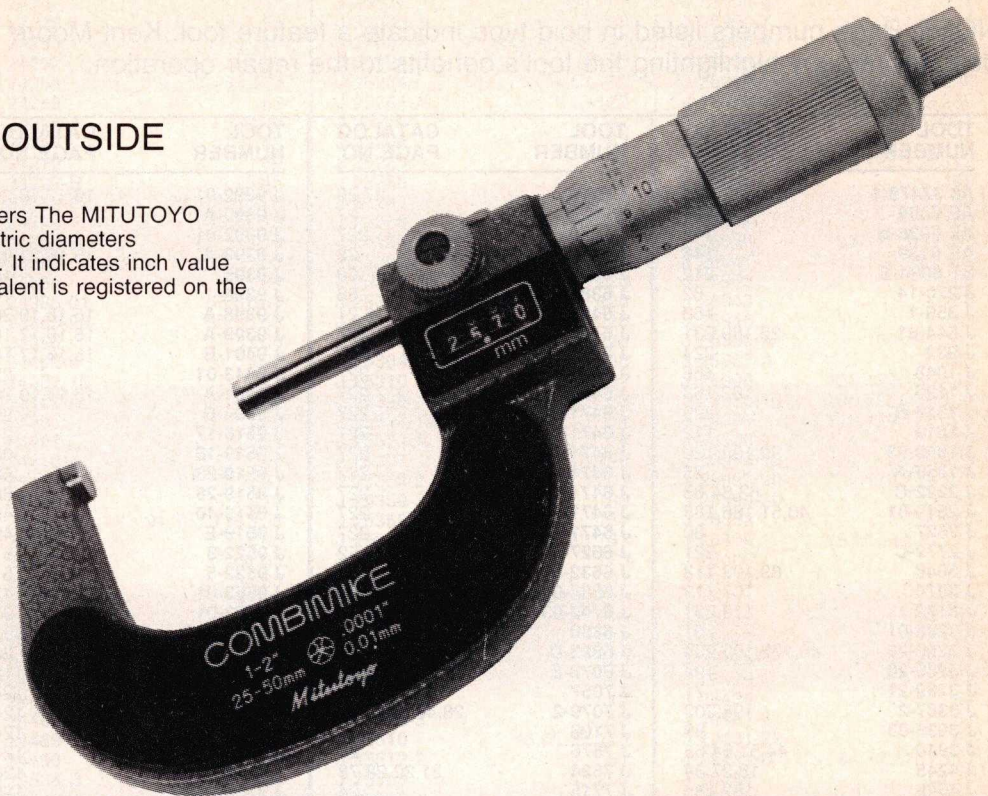
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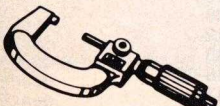
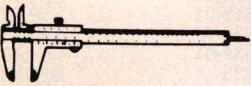
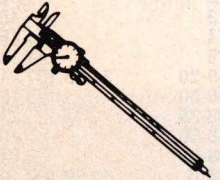

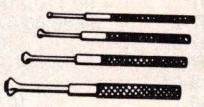
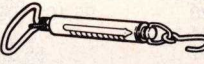
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J 26900-4

COMBIMIKE DIGITAL-OUTSIDE MICROMETERS

Combination English-Metric Micrometers The MITUTOYO "Combimike" reads both inch and Metric diameters simultaneously as the Spindle rotates. It indicates inch value on the Thimble, while its Metric equivalent is registered on the Digital Counter.



	J 26900-1 OUTSIDE MICROMETER 0 to 1" Combination english-metric digital counter
	J 26900-2 OUTSIDE MICROMETER 1" to 2" Combination english-metric digital counter
	J 26900-3 OUTSIDE MICROMETER 2" to 3" Combination english-metric digital counter
	J 26900-4 OUTSIDE MICROMETER 3" to 4" Combination english-metric digital counter
	J 26900-5 VERNIER CALIPER Range 6" Combination english metric
	J 26900-6 DIAL CALIPER Range 6" english
	J 26900-7 DIAL CALIPER Range 150mm metric
	J 3172 THICKNESS GAUGE 15 leaves .0015 thru .015" (.001 increments)
	J 26900-8 THICKNESS GAUGE 26 leaves .002" thru .035"
	J 26900-9 THICKNESS GAUGE 13 leaves .03 thru 0.5mm
	J 26900-14 SMALL HOLE GAUGES (Set of 4) (.125" to .500")
	J 544-01 TENSION SCALE 0 to 4 lbs.

KENT-MOORE TOOL NUMBER/CATALOG PAGE NUMBER

NOTE: Page numbers listed in bold type indicate a feature tool. Kent-Moore featured tools contain descriptive copy highlighting the tool's benefits to the repair operation.

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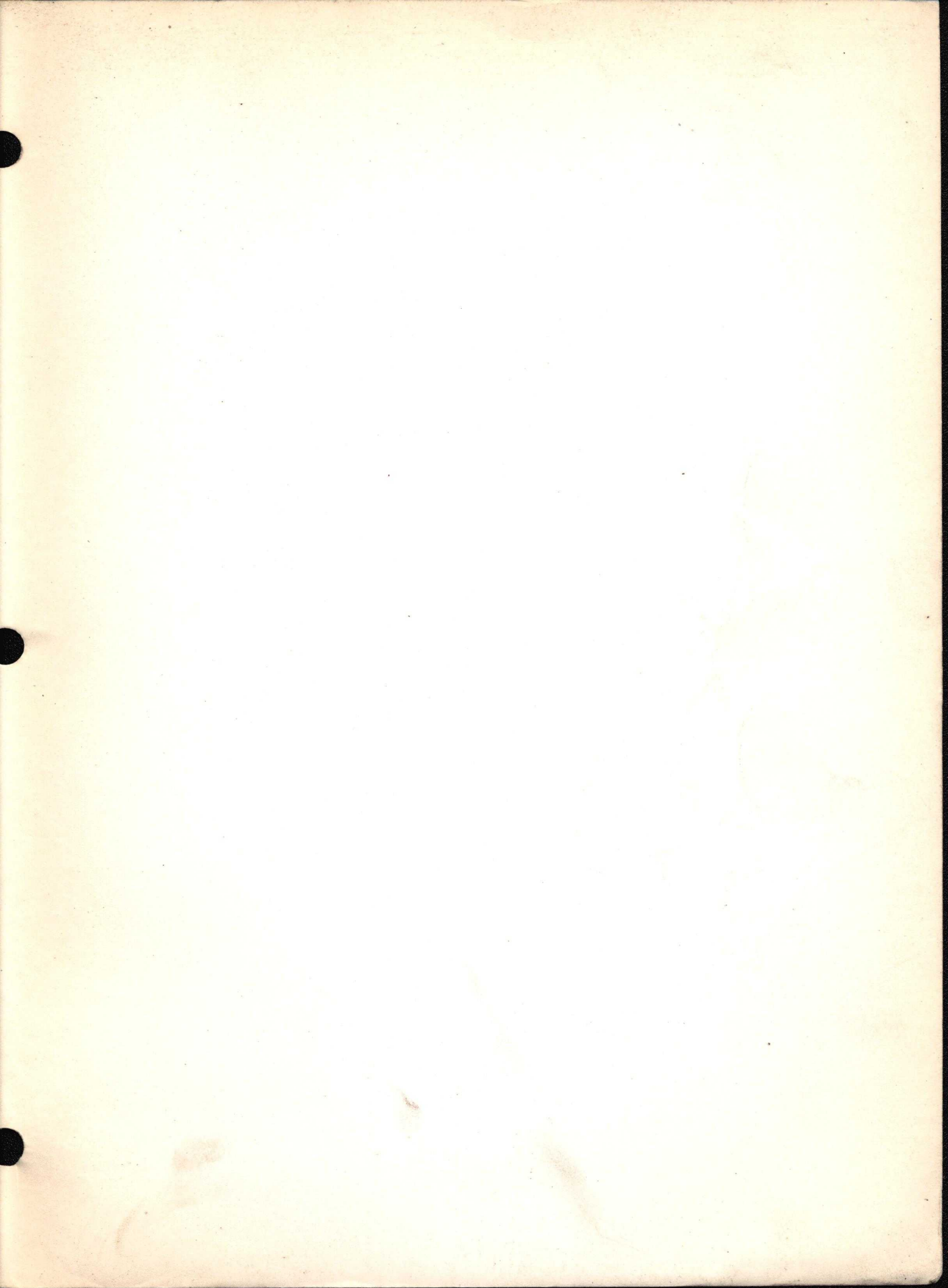
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